Mojave Desert
Air Quality Management District

Draft

Staff Report
Proposed Adoption of
Rule 1133 – *Composting and Related Operations*

For adoption on
October 27, 2008

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STAFF REPORT
Rule 1133 – *Composting and Related Operations*

I. PURPOSE OF STAFF REPORT

A staff report serves several discrete purposes. Its primary purpose is to provide a summary and background material to the members of the Governing Board. This allows the members of the Governing Board to be fully informed before making any required decision. It also provides the documentation necessary for the Governing Board to make any findings, which are required by law to be made prior to the approval or adoption of a document. In addition, a staff report ensures that the correct procedures and proper documentation for approval or adoption of a document have been performed. Finally, the staff report provides evidence for defense against legal challenges regarding the propriety of the approval or adoption of the document.

II. EXECUTIVE SUMMARY

The MDAQMD has the authority pursuant to California Health and Safety Code (H&S Code) §40702 to adopt, amend or repeal rules and regulations. The MDAQMD is proposing to adopt Rule 1133 – *Composting and Related Operations* for inclusion in the current rulebook.

California Health & Safety Code §39614(d) (H&S Code) requires the Mojave Desert Air Quality Management District (MDAQMD) to adopt the most readily available, feasible and cost-effective local control measures for Particulate Matter (PM) as contained on a list developed by the California Air Resources Board (CARB). CARB has identified on its list of local control measures several composting and composting related measures as potentially feasible. The District evaluated the availability, feasibility and cost-effectiveness of applying those composting and composting related control measures within the MDAQMD in the document titled *Health & Safety Code §39614 Feasibility Analysis for Composting and Related Operations* (Technical Discussion).

The Technical Discussion determined that Best Management Practices for composting and composting related operations were available, feasible and cost-effective within the MDAQMD regardless of facility size or throughput for course particulate (PM_{10}) and its precursors. Add-on control technology for composting and composting related operations was determined to not be feasible or cost effective within the MDAQMD. However, the Technical Discussion also determined that add-on control technology for composting and composting related operations would be feasible within the MDAQMD for control of fine particulate matter ($PM_{2.5}$). Such control would be necessary and feasible if and only if the MDAQMD was designated nonattainment for the National Ambient Air Quality Standard (NAAQS) for fine particulate. The Governing Board of the MDAQMD received and filed the Technical Discussion. Since the MDAQMD does not currently have a rule regarding composting and composting related operations the Governing Board directed Staff to adopt a best management practices rule for composting and composting related operations that includes the add-on control technology

requirement as a contingency measure triggered by a nonattainment designation for the federal fine particulate matter NAAQS.

III. STAFF RECOMMENDATION

Staff recommends that the Governing Board of the Mojave Desert Air Quality Management District (District) adopt the proposed Rule 1133 – *Composting and Related Operations* and approve the appropriate CEQA documentation. This action is necessary to satisfy the recommendation made in the *Health & Safety Code §39614 Feasibility Analysis for Composting and Related Operations* that was received and filed by the MDAQMD Governing Board on 10/22/2007.

IV. LEGAL REQUIREMENTS CHECKLIST

The findings and analysis as indicated below are required for the procedurally correct adoption of Rule 1133 – *Composting and Related Operations*. Each item is discussed, if applicable, in Section V. Copies of related documents are included in the appropriate appendices.

FINDINGS REQUIRED FOR RULES & REGULATIONS:

X Necessity

X Authority

X Clarity

X Consistency

X Non-duplication

X Reference

X Public Notice & Comment

X Public Hearing

REQUIREMENTS FOR STATE IMPLEMENTATION PLAN SUBMISSION (SIP):

X Public Notice & Comment

X Availability of Document

X Notice to Specified Entities (State, Air Districts, USEPA, Other States)

X Public Hearing

X Legal Authority to adopt and implement the document.

X Applicable State laws and regulations were followed.

ELEMENTS OF A FEDERAL SUBMISSION:

X Elements as set forth in applicable Federal law or regulations.

CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS (CEQA):

N/A Ministerial Action

X Exemption

N/A Negative Declaration

N/A Environmental Impact Report

X Appropriate findings, if necessary.

X Public Notice & Comment

SUPPLEMENTAL ENVIRONMENTAL ANALYSIS (RULES & REGULATIONS ONLY):

X Environmental impacts of compliance.

N/A Mitigation of impacts.

N/A Alternative methods of compliance.

OTHER:

X Written analysis of existing air pollution control requirements

X Economic Analysis

X Public Review

V. DISCUSSION OF LEGAL REQUIREMENTS

A. REQUIRED ELEMENTS/FINDINGS

This section discusses the State of California statutory requirements that apply to the proposed adoption of Rule 1133. These are actions that need to be performed and/or information that must be provided in order to adopt the rule in a procedurally correct manner.

1. State Findings Required for Adoption of Rules & Regulations

Before adopting, amending, or repealing a rule or regulation, the District Governing Board is required to make findings of necessity, authority, clarity, consistency, non-duplication, and reference based upon relevant information presented at the hearing. The information below is provided to assist the Board in making these findings.

a. Necessity

The adoption of proposed Rule 1133 is necessary to satisfy the provisions of H&S Code §39614(d) which requires the adoption of readily available, feasible and cost-effective control measures for particulate matter from a list of potential local control measures promulgated by CARB. The level of control contained in proposed Rule 1133 has been determined to be readily available, feasible and cost-effective based upon an analysis and recommendations made in the *Health & Safety Code §39614 Feasibility Analysis for Composting and Related Operations* that was received and filed by the MDAQMD Governing Board on 10/22/2007 and upon updated analysis contained herein.

b. Authority

The District has the authority pursuant to California Health and Safety Code (H&S Code) §40702 to adopt, amend or repeal rules and regulations.

c. Clarity

Proposed Rule 1133 is clear in that it is written so that the persons subject to the Rule can easily understand the meaning. The Rule is as clear as possible given the nature of the subject matter involved. Definitions that are standardized to the industry subject to the Rule have been provided in the body of the rule itself for ease of use.

d. Consistency

The adoption of proposed Rule 1133 is in harmony with, and not in conflict with or contradictory to any state law or regulation, federal law or regulation, or court decisions. The MDAQMD has been designated nonattainment for the Federal PM_{10} NAAQS and classified as "Moderate". It is currently unclassified/attainment for the Federal $PM_{2.5}$ NAAQS (40 CFR 51.81.305). The MDAQMD is nonattainment for the State Ambient Air Quality Standard for PM_{10} as specified in 17 California Code of Regulations §60205. The level of control specified in proposed Rule 1133 is consistent with the level of control required pursuant to these designations.

e. Non-duplication

The adoption of proposed Rule 1133 does not impose the same requirements as any existing state or federal law or regulation because there is no existing law or regulation directly governing the air emissions of particulate matter and its precursors from composting and related operations. Please note that there are other state, federal and local laws, regulations, rules and/or ordinances which may directly regulate composting operations under other modalities (e.g. water, solid waste) and such regulations may have indirect impacts upon air quality issues. Proposed Rule 1133, as a particulate matter emissions control measure, should not duplicate these requirements.

State law (H&S Code §41705(a)(3) and (b)) does restrict the air district's control of odors from composting operations however proposed Rule 1133 is not an odor control measure and therefore is not duplicative.

f. Reference

The District has the authority pursuant to H&S Code §40702 to adopt, amend or repeal rules and regulations. The District is required to adopt readily available, feasible and cost-effective control measures for particulate matter from a list of potential local control measures promulgated by CARB pursuant to H&S Code §39614(d).

g. Public Notice & Comment, Public Hearing

Notice for the public hearing for the proposed adoption of Rule 1133 will be published 09/26/2008. See Appendix "B" for a copy of the public notice. See Appendix "C" for copies of comments, if any, and District responses.

2. Federal Elements (SIP Submittals, Other Federal Submittals)

Submittals to the United States Environmental Protection Agency (USEPA) are required to include various elements depending upon the type of document submitted and the underlying federal law that requires the submittal. The information below indicates which elements are required for the adoption of proposed Rule 1133 and how they were satisfied.

a. Satisfaction of Underlying Federal Requirements

Not applicable. There is no direct federal requirement to adopt regulations regarding composting operations. In addition, the District has not identified the control of composting operations in its PM_{10} planning documents as a control measure necessary to attain the NAAQS. Therefore, proposed Rule 1133 is not required to be submitted as an element of the State Implementation Plan (SIP) at this time.

However, if the District is in the future designated nonattainment for the Federal $PM_{2.5}$ NAAQS this rule may need, in the future, to become federally enforceable. Therefore, the District is adopting this rule in accordance with federal procedures to enable such submission to be made in the future.

b. Public Notice and Comment

Notice for the public hearing for the adoption of proposed Rule 1133 will be published 09/26/2008. See Appendix "B" for a copy of the public notice. See Appendix "C" for copies of comments and District responses.

c. Availability of Document

Copies of the proposed Rule 1133 and the accompanying draft staff report will be made available to the public on or before 09/26/2008. The proposed Rule was presented to the Technical Advisory Committee, a committee consisting of a variety of regulated industry and local governmental entities, on 07/14/2008.

d. Notice to Specified Entities

Copies of the proposed Rule 1133 and the accompanying draft staff report will be sent to all affected agencies. The proposed adoption will be sent to CARB and USEPA on or about 09/24/2008.

e. Public Hearing

A public hearing to consider the adoption of proposed Rule 1133 has been set for 10/27/2008.

f. Legal Authority to Adopt and Implement

The District has the authority pursuant to H&S Code §40702 to adopt, amend, or repeal rules and regulations and to do such acts as may be necessary or proper to execute the duties imposed upon the District.

g. Applicable State Laws and Regulations Were Followed

Public notice and hearing procedures pursuant to H&S Code §§40725-40728 have been followed. See Section (V)(A)(1) above for compliance with state findings required pursuant to H&S Code §40727. See Section (V)(B) below for compliance with the required analysis of existing requirements pursuant to H&S Code §40727.2. See Section (V)(C) for compliance with economic analysis requirements pursuant to H&S Code §40920.6. See Section (V)(D) below for compliance with provisions of the California Environmental Quality Act (CEQA).

B. WRITTEN ANALYSIS OF EXISTING REQUIREMENTS

H&S Code §40727.2 requires air districts to prepare a written analysis of all existing federal air pollution control requirements that apply to the same equipment or source type as the rule proposed for modification by the district. Such analysis is required to identify and examine federal requirements, including but not limited to emissions control measures identified as best available control technology for new or modified equipment. There are no existing federal requirements for the control of air emissions that apply to composting and related operations.

C. ECONOMIC ANALYSIS

1. General

Proposed Rule 1133 will not have an adverse economic impact on the entities subject to the proposed Rule. Please see the incremental cost-effectiveness analysis below for a more detailed analysis of potential economic impact.

2. Incremental Cost-Effectiveness

Pursuant to H&S Code §40920.6, incremental cost-effectiveness calculations are required for rules and regulations which are adopted or amended to meet the California Clean Air Act requirements for Best Available Retrofit Control

Technology (BARCT) or "all feasible measures" to control volatile compounds, oxides of nitrogen or oxides of sulfur.

While proposed Rule 1133 does not impose BARCT or "all feasible measures" and thus an incremental cost-effectiveness analysis is not mandatory, the District conducted a cost-effectiveness analysis as part of the Technical Discussion document. The cost-effectiveness analysis contained in the Technical Discussion document was based upon cost estimates contained in the staff reports for San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4565 as adopted in 2007 and South Coast Air Quality Management District (SCAQMD) Rule 1133 as adopted in 2003.[1] Actual cost data is now available from several sources, including an operating enclosed facility located in Rancho Cucamonga, CA. The following cost-effectiveness analysis is an update of the previous analysis using the most recent cost data available.

The recordkeeping provisions are deemed to have negligible cost. The Best Management Practice provisions (BMPs) have been estimated by SJVAPCD to have a 75 percent VOC control effect, and the District estimated those measures would double the Operational and Maintenance (O&M) cost of a simple windrow facility. The cost of the $PM_{2.5}$ contingency measure was estimated using the actual costs from an existing enclosed facility located in Rancho Cucamonga, CA that is currently vented through a biofilter. Control measures in effect at that facility were verified by staff visit to the site.

The results of the average cost-effectiveness analysis show that the BMPs are very cost-effective for VOC control at an average cost of $88 per ton of VOC reduced (this despite the fact that the effect of such measures for ammonia reduction has not been established). By contrast, the contingency measure enclosure and control requirement is not cost-effective at $63,893 per ton of VOC and $84,868 per ton of ammonia reduced (based on assumed compliance with the current SCAQMD 1133 and actual facility costs as derived from the facility budget and other financial documents).

On an incremental basis the contingency measure is much less cost-effective than the BMPs, as the vastly greater cost provides a minor increase in VOC reductions. The increased VOC control increment of the contingency measure costs $896,133 per ton of VOC reduced.

[1] These versions of the SJVAPCD and SCAQMD rules were used as the basis for comparison because they were the rules identified in CARB's list of local PM control measures developed pursuant to the provisions of H&S 39614. A copy of this list may be found at: http://www.arb.ca.gov/pm/pmmeasures/pmmeasures.htm .

	Uncontrolled	BMP	IERCF
	Windrow	Capped Windrow	Enclosure + ASP to biofilter
Operational Days	260	260	260
Project Term (years)	15	15	15
Fiscal Year	1998	1998	2007
Sample Project Throughput (wet tons/year)	*547500*	*547500*	*150000*
Sample Project Capital Cost	*$ 6,305,000*	*$ 6,305,000*	*$ 89,354,888*
Annualized Sample Project Capital Cost	*$ 567,079*	*$ 567,079*	*$ 8,036,677*
Sample Project O&M	*$ 56,708*	*$ 113,416*	*$ 8,000,000*
Costs			
Equivalent Project Throughput (wet tons/year)	400000	400000	400000
Equivalent Project Capital Cost (2008 $)	$ 6,190,607	$ 6,190,607	$ 245,428,092
Equivalent Project O&M (2008 $)	$ 55,679	$ 111,358	$ 21,973,333
Discounted Cash Flow Factor (15 @ 4%)	11.118	11.118	11.118
DCF O&M Costs (2008 $)	$ 619,039	$ 1,238,078	$ 244,299,520
Emissions			
VOC (tpy)	624	624	624
Ammonia (tpy)	562	562	562
VOC Capture Efficiency	n/a	0.75	95%
VOC Destruction Efficiency	n/a	1	85%
VOC reductions (tpy)	n/a	468	503.88
Ammonia Capture Efficiency	n/a	0%	90%
Ammonia Destruction Efficiency	n/a	0%	75%
Ammonia reductions (tpy)	n/a	0.0	379.4
Cost Effectiveness			
Average			
VOC Cost Effectiveness ($/ton)	n/a	$ 88	$ 63,893
Ammonia Cost Effectiveness ($/ton)	n/a	n/a	$ 84,868
Incremental			
VOC Cost Effectiveness ($/ton)	n/a	n/a	$ 896,133
Ammonia Cost Effectiveness ($/ton)	n/a	n/a	$ 84,759

Notes:
Sample windrow project is Bio-gro
BMP assumes 75% reduction of VOC by pseudo-biofilter layer at double O&M cost
Controlled project is the existing IERCF enclosed co-composting facility in Rancho Cucamonga, California, assumed to comply with SC1133 and SC1133.2
IERCF cost data from IEUA operating and capital program budget FY 2007/2008
Real interest rate of 4% at 15 years used for Discounted Cash Flow Factor (SCAQMD method)
Annual inflation rate of 3% used to adjust to current year (2008 dollars)
Capital cost annualized by multiplying by CRF based on 15 years at 4%
Emission factors in pounds per ton of wet throughput are 3.12 VOC and 2.81 ammonia
Emission factors from "Estimating Ammonia Emissions from Anthropogenic Nonagricultural Sources" EIIP, April 2004
BMP 75% reduction from "Emissions Testing of VOC from Greenwaste Composting at the Modesto Compost Facility in the San Joaquin Valley" CIWMB October, 2007

D. ENVIRONMENTAL ANALYSIS (CEQA)

Through the process described below the appropriate California Environmental Quality Act (CEQA) process for the adoption of proposed Rule 1133 was determined.

1. The adoption of proposed Rule 1133 meets the CEQA definition of "project". It is not a "ministerial" action.

2. The adoption of proposed Rule 1133 is exempt from CEQA review because it will not create any adverse impacts on the environment. Proposed Rule 1133 is an action taken by a regulatory agency pursuant to the provisions of H&S Code Division 26 to assure the protection of the environment, specifically the proposed Rule enhances the control of PM_{10} emissions from certain composting and composting related operations where no such control has been previously imposed upon this particular source category. As a new regulatory control measure, the adoption of proposed Rule 1133 has no potential to cause the release of additional air contaminants or create any adverse environmental impacts. Therefore, a Class 8 categorical exemption (14 Cal. Code Reg. §15308) applies. Copies of the documents relating to CEQA can be found in Appendix "D".

E. SUPPLEMENTAL ENVIRONMENTAL ANALYSIS

1. Potential Environmental Impacts

The adoption of proposed Rule 1133 will result in reductions of emissions of regulated pollutants or their precursors through operational changes, and so will have no negative environmental impacts. However, some interest has been shown in the greenhouse gas implications of the adoption of proposed Rule 1133. Greenhouse gases (other than those oxides of nitrogen considered greenhouse gases) are not currently regulated air pollutants for the District, so this analysis is not a formal requirement, is for informational purposes only, and is being performed using the best available information.

The carbon involved in composting is rapid cycle carbon, as carbon involved in ongoing organic processes (such as plant growth). The release of rapid cycle carbon is not considered significant on a global basis due to constant balanced uptake of carbon through organic processes. The carbon involved in transportation of compost and compost feedstocks is long cycle carbon, carbon derived from fossil fuel combustion. The release of long cycle carbon is considered significant on a global basis (as there is no subsequent uptake). In addition, carbon contained in methane has a greater warming potential than carbon contained in carbon dioxide, under current global heat balance understanding.

Composting has been identified as a method to reduce the amount of organic material deposited in landfills, where the organics decompose anaerobically and produce methane as a byproduct. The composting process is designed to decompose organics aerobically with volatile organic compounds as a byproduct.

On a greenhouse gas basis, aerobic decomposition is preferable to anaerobic decomposition.

The adoption of proposed Rule 1133 is slightly positive for greenhouse gases, as the operational requirements encourage prompt use of decomposable materials and encourage the aerobic decomposition of compost (reducing methane-forming anaerobic decomposition in each case). The contingency measure requires the reduction of volatile organic compound emissions to atmosphere – should this measure become active, the District expects either biofiltration or thermal oxidation to be used on the organic emissions. In either case, the majority of the organics would be emitted to the atmosphere as carbon dioxide. As the carbon involved is rapid cycle carbon, this is not significant from a greenhouse basis. However, implementation of the contingency measure may involve greater emissions of long cycle carbon from fossil fuel combustion, particularly in the thermal oxidation scenario. This aspect can be addressed at the state level as part of the currently ongoing waste lifecycle analyses being performed by the State of California.

2. Mitigation of Impacts

Not applicable.

3. Alternative Methods of Compliance

Not applicable.

F. PUBLIC REVIEW

See Staff Report Section (V)(A)(1)(g) and (2)(b), as well as Appendix "B".

A wide variety of opportunities have been made for input and comment on preliminary draft Rule 1133. Questions were answered at an informal meeting on 06/23/2008 following the Governing Board meeting of that date. The Rule was presented to the Technical Advisory Committee on 07/14/2008. Public workshops were held in Hinkley on 08/18/2008, Barstow on 08/19/2008, Victorville on 08/20/2008, and Helendale on 08/21/2008. Members of the community and industry have attended most regularly scheduled Governing Board meetings. Two additional Public Workshops are tentatively scheduled for Victorville on 10/08/2008 and Hinkley on 10/09/2008.

VI. TECHNICAL DISCUSSION

A. SOURCE DESCRIPTION

Proposed Rule 1133 applies to new and existing Chipping and Grinding activities, and new and existing Composting and Related Operations. Several facilities in the MDAQMD have operations subject to the provisions of the proposed Rule. These facilities include the Victor Valley Regional Composting Facility, the Fort Irwin

National Training Center Composting Facility, the proposed Nursery Products Co-Composting facility, and sanitary landfills that accept biosolids.

Composting is one of several methods for treating putrescible materials such as biosolids (wastewater sludge), manure, food waste, and green waste ("feedstock") to create a marketable end product that is easy to handle, store, and use. The end product is a humus-like material that can be applied as a soil conditioner and fertilizer to gardens, food and feed crops, and rangelands. This compost provides large quantities of organic matter and nutrients (such as nitrogen and potassium) to the soil, improves soil texture, and elevates soil cation exchange capacity (an indication of the soil's ability to hold nutrients), all characteristics of a good organic fertilizer. Compost derived from these materials is safe to use and generally has a high degree of acceptability by the public. Thus, it competes well with other bulk and bagged products available to homeowners, landscapers, farmers, and ranchers.[2]

There are three commonly used methods of composting putrescible materials; Aerated Static Pile (ASP), Windrow, and In-Vessel. Each method involves mixing the feedstock with a bulking agent to provide carbon and increase porosity. The resulting mixture is piled in or placed in a vessel where microbial activity causes the temperature of the mixture to rise during the "active composting" period. The specific temperatures that must be achieved and maintained for successful composting vary based on the method and use of the end product. After active composting, the material is cured and distributed. These three commonly employed composting methods are described in more specificity below. A fourth method (static pile) is not recommended for composting putrescible materials based on a lack of operational control.[3]

- Aerated Static Pile (ASP) – Feedstock is mechanically mixed with a bulking agent and stacked into long piles over a bed of pipes through which air is transferred to the composting material. After active composting, as the pile is starting to cool down, the material is moved into a curing pile[4].

- Windrow – Feedstock is mixed with bulking agent and piled in long rows. Because there is no piping to supply air to the piles, they are mechanically turned to increase the amount of oxygen. This periodic mixing is essential to move outer surfaces of material inward so they are subjected to the higher temperatures deeper in the pile. A number of turning devices are available, including but not limited to: drums and belts powered by agricultural equipment and pushed or pulled through the composting pile; self-propelled models that straddle the composting pile; and off road equipment. As with aerated static pile composting, the material is moved into curing piles after active composting. Several rows may be combined into a larger pile for curing[5].

[2] United States Environmental Protection Agency, *Biosolids Technology Fact Sheet, Use of Composting for Biosolids Management*, EPA 832-F-02-024, September 2002, pg.1.
[3] Ibid, pg. 1.
[4] Ibid, pg. 2.
[5] Ibid, pg. 2.

- In-Vessel – A mixture of feedstock and bulking agent is fed into a silo, tunnel, channel, or vessel. Augers, conveyors, rams, or other devices are used to aerate, mix, and move the product through the vessel to the discharge point. Air is generally blown into the mixture. After active composting, the finished product is usually stored in a pile for additional curing prior to distribution. An ASP composting operation conducted within a building vented to a control device may also be considered "In-Vessel" composting [6].

All three common composting methods require the use of bulking agents, but the type of agent varies. Wood chips and sawdust are commonly used, but many other materials are suitable.

Because composting operations differ widely based on the type of material processed, the ambient weather, the site geography, the site throughput, and other factors, it is very difficult to compare composting facilities.

B. EMISSIONS

There are a variety of air contaminants emitted during composting operations. The primary air contaminants emitted are Volatile Organic Compounds (VOCs) as an ozone precursor, Ammonia as a $PM_{2.5}$ precursor and PM.

As the District does not currently contain any co-composting operations, and the proposed Rule has quantifiable emission reductions for co-composting operations only, there are no emission reductions of regulated pollutants associated with the proposed Rule.

As indicated from the public comments to proposed Rule 1133 there is public concern regarding the health and environmental effects from the emissions resulting from composting operations. These include not only VOC, ammonia and PM but also pathogens, bioaerosols and odors. The following brief discussion sets forth the emissions factors used in estimating emissions from composting operations as well as the health and environmental concerns with emissions from such facilities.

1. Emissions Factors

For emissions purposes, it is assumed that the active phase of the composting cycle takes approximately 22 days, with the resulting product being cured for at least 30 additional days before use. The active composting phase of the process is the time period where organic material decomposes at its fastest rate and emissions are generated at a high rate. The compost may be considered cured or stable by the oxygen uptake rate, a low degree of reheating in curing piles, the organic content of the compost, and the presence of nitrates and the absence of ammonia and starch in the compost. An accepted method for determining the maturity of compost is the Solvita Maturity Index.

[6] United States Environmental Protection Agency, *Biosolids Technology Fact Sheet, In-Vessel Composting of Biosolids,* EPA 832-F-00-061, September 2000, pg.1.

Based on the 22-day assumption, for VOC, 80 percent of the emissions are released during the active phase and 20 percent of emissions are released during the curing phase of the process. For ammonia, 50 percent of the emissions are released during the active phase, and 50 percent of emissions are released during the curing phase of the process[7]. The Emission Inventory Improvement Program (EIIP), *Estimating Ammonia Emissions from Anthropogenic Nonagricultural Sources, Draft Final Report* (April 2004) assigns the recommended emission factors for composting operations which compost a mixture of biosolids and green waste (50:50 mixture by weight) as 3.12 lb/ton for VOCs and 2.81 lb/ton for ammonia. These values are presented in Table 1[8]. The use of a green waste composting factor results in conservatively high emissions (by a factor of 3 or more) for the composting sector, as not all composting operations accept green waste. Increasing emissions has the effect of reducing (improving) the cost-effectiveness of control technology by increasing the emissions controlled. An applicable PM emissions factor for co-composting and related operations was not available.

Table 1 - Emission Factors for Biosolids Composting

	Total Process	*Active Composting*	*Curing*
VOC Emission Rate (lb/ton)	3.12	2.50	0.62
Ammonia Emission Factor (lb/ton)	2.81	1.40	1.40

2. VOC

VOCs are produced during the anaerobic (in the absence of oxygen) decomposition of organic material. Decomposition occurs when chipped and ground material is composted or when the material is left in an unmanaged state and begins to rot. While there are no NAAQS for VOCs they are regulated within the MDAQMD because they contribute to the formation of ozone and are transformed into organic aerosols in the atmosphere, contributing to higher PM_{10} and lower visibility levels. Ozone is formed in the atmosphere through a photochemical reaction of VOC and NO_X. The MDAQMD has been designated nonattainment for State and Federal ozone standards, making VOCs a regulated pollutant throughout the MDAQMD.

Ozone is a deep lung irritant, causing the lung passages to become inflamed and swollen. Exposure to ozone produces alterations in respiration, the most characteristic of which is shallow, rapid breathing and a decrease in pulmonary

[7] South Coast Air Quality Management District, *Technology Assessment for Proposed Rule 1133,* March 2002, pg. 2-4.
[8] Emissions Inventory Improvement Program, *Estimating Ammonia Emissions From Anthropogenic Nonagricultural Sources – Draft Final Report*, April 2004, pg. 21.

performance. Ozone reduces the respiratory system's ability to fight infection and to remove foreign particles. People who suffer from respiratory diseases such as asthma, emphysema, and chronic bronchitis are more sensitive to ozone's effects. Early studies suggested that long-term exposure to ozone results in adverse effects on morphology and function of the lung and acceleration of lung-tumor formation and aging. Ozone exposure also increases the sensitivity of the lung to broncho-constrictive agents such as histamine, acetylcholine, and allergens.

Currently there are no specific control measures applicable to composting and composting related activities within the District. The primary rules currently applicable to new and existing facilities are Rule 402 – *Nuisance* and Rule 403 – *Fugitive Dust*, neither of which has a VOC reduction impact. New facilities, while subject to Regulation XIII – *New Source Review*, are not expected to trigger facility wide Best Available Control Technology (BACT) requirements due to the fact that only emissions from stationary emissions units may be considered in calculation of threshold levels and the primary emissions from composting operations tend to be mobile and/or fugitive in nature. Therefore, proposed Rule 1133 will result in reduction in VOC emissions from affected composting related activities in that it will impose operational requirements where none were required previously. While the MDAQMD is not claiming specific emissions reductions in regard to VOCs, BMPs such as required by proposed Rule 1133 have been estimated by SJVAPCD to reduce VOC emissions by up to 75 percent from an uncontrolled state.

3. Ammonia

Composting and related operations (i.e., chipping and grinding) are a source of ammonia, which is a precursor to $PM_{2.5}$. Ammonia in the atmosphere reacts with nitric acid and sulfuric acid to produce nitrate and sulfate particles, a constituent of $PM_{2.5}$. Ammonia is generated during biological degradation (or decomposition) of organic materials (i.e., yard waste, manure, sewer sludge, etc.) that occurs during composting and when chipped and ground material begins to rot. Ammonia is produced in both aerobic (in the presence of oxygen) and anaerobic (in the absence of oxygen) environments. Composting is an aerobic process but can become anaerobic when for example, a pile is built incorrectly, the pile gets too little oxygen, the temperature is too high, or there is too little or too much moisture. Chipped and ground material that is left unmanaged likewise begins to decompose and produce ammonia emissions for the same reasons as composting.

The MDAQMD has been designated attainment/unclassified for the Federal $PM_{2.5}$ standard, and nonattainment for the State $PM_{2.5}$ standard. In the absence of state planning requirements for $PM_{2.5}$, the $PM_{2.5}$ precursor ammonia is not a regulated pollutant within the MDAQMD. Proposed Rule 1133 contains a contingency measure that would require specific reductions in $PM_{2.5}$ precursors if the District is classified nonattainment for the Federal $PM_{2.5}$ standard. Thus emissions

reductions for ammonia would result from the proposed Rule only if this contingency measure was triggered.

4. Particulate Matter

Composting and related operations are sources of fugitive PM_{10}.

PM_{10} is a public health concern since particles less than 10 microns can be deposited in, and can damage, the airways of the lower respiratory tract and the gas-exchange portions of the lung. The adverse health effects of particulates, especially PM_{10}, are well documented. Various health studies have linked PM_{10} emissions to increased respiratory infections, more severe asthma, declines in pulmonary function, and shortened life spans. Specifically, recent studies indicate that the current ambient levels of PM_{10} (30 to 150 $\mu g/m^3$) experienced in many different communities in the United States are associated with increases in daily cardio-respiratory mortality and in total mortality, excluding accidental and suicide deaths. Increases in ambient PM_{10} levels have also been shown to result in increases in acute respiratory hospital admissions, school absences in children, and increases in the use of medications in children and adults with asthma.[9]

PM_{10} is generated when composting materials are unloaded, when piles are turned, moved, from wind entrainment of static uncovered piles, and screening of finished compost. Associated activities like chipping and grinding also produce PM_{10} emissions when the wood and green waste are mechanically ground and shredded. PM_{10} is also generated from periodic grading, onsite equipment operations, fugitive dust from haul trucks and employee commute trips.

Windblown dust from windrows has been suggested as one of the main contributors to the overall emissions from a composting facility. According to a report prepared by the County of Los Angeles Department of Health Services there are two reasons this is not the case[10]. The first is that the compost material is very moist and not a candidate for wind erosion. Secondly, a crust appears to form on the surface of the windrows that is created by the sludge, which has a consistency similar to glue, which also makes the windrows resistant to wind erosion.

There were no specific PM emission factors located for composting windrows. However, commonly accepted emission factor sources, such as USEPA's AP-42, contain many emission factors for fugitive sources, including grading, vehicle trips on paved and unpaved roads, and bulk material handling.

Fugitive PM emissions from composting operations are currently regulated within the District by Rule 402 – *Nuisance* and Rule 403 – *Fugitive Dust.* Proposed Rule

[9] South Coast AQMD, *Technology Assessment for Proposed Rule 1133* (March 2002), pg. 1-2.
[10] County of Los Angeles Department of Health Services, *Public Health Issues Regarding Proposed Wheelabrator Clean Water Systems (Bio Gro) Sewage Sludge Composting Facility* (January 11, 1997), pg. 6.

1133 adds BMPs for this particular source category and as is expected to cause some reductions in PM emissions as from the rules currently in place.

5. Pathogens and Bioaerosols

a. Pathogens

Sewage sludge may contain a wide variety of pathogenic (or disease causing) bacteria, viruses, protozoans, and helminths (roundworms and tapeworms). Exposure to pathogens is assumed to occur through direct contact (direct ingestion or adsorption through a cut or exposed wound), inhalation, or by vectors (flies, mosquitoes, fleas, or rodents). The concern over any particular pathogen that may be present in biosolids is related to its ability to infect a host and cause disease. This ability depends on a wide variety of environmental factors (e.g., ability to survive wastewater treatment, longevity in the environment) and host-specific factors (sanitary habits, overall health, and any immune system impairments).

> *The greatest direct exposure to biosolids is experienced by wastewater treatment plant operators and biosolids management facilities operating personnel. The greatest possible health risk associated with direct contact would probably involve a person having a cut or an exposed wound coming in direct contact with biosolids or contaminated operating equipment as the result of an unusual incident such as a fall or accident. Studies of the incidence of disease among wastewater personnel have indicated that they have no greater incidence of disease than the population in general (Clark et al. 1980, Cooper 1991). Farmers who have worked biosolids-amended soils have direct contact with biosolids and can get biosolids on their clothing. Studies have also been performed to compare the health of farm families from those farms using biosolids with the health of families on farms not using biosolids, and no health differences have been found (Dorn et al. 1985).*[11]
>
> *Dust and fine particles that can be inhaled and reach the deepest parts of the lung are of particular health concern. Measurements of bacteria in the air downwind of biosolids processing or application sites is limited (Pillai et al. 1996) and the data collected shows the presence of high numbers of bacteria when there is mixing or dispersal (like*

[11] California State Water Resources Control Board, *General Waste Discharge Requirements for Biosolids Land Application*, Draft Statewide Program EIR (February 2004), pg. 5-19.

a manure spreader), but the risk of an infectious dose of a pathogenic bacterial species in an outdoor area appears to be negligible (Pillai et al. 1996). No reported cases of bacterial or viral illness derived from such an occurrence were found during the literature review including the work of Pillai et al. (1996). Studies of composting operations and at farms where biosolids have been used show no unusual health effects compared to farms where no biosolids were applied (Dorn et al. 1985). Those at risk in the areas immediately adjacent to such operations are immunosuppressed people such as organ transplant recipients, and people with cancer, AIDS, or leukemia (Rosenberg and Minimato 1996, Ampel 1996). Such operations have been regulated such that setbacks and restrictions on dust generation have been placed on them by the California Integrated Waste Management Board.[12]

No reported cases of air-borne transmission of disease have been documented in California as it relates to biosolids management although the potential exists.

Transport of bacteria, viruses and other pathogens by air or by aerial vectors such as insects and birds has been hypothesized, but there is no substantiation in researched literature to support this as a method of disease transmission from biosolids operations. Proposed Rule 1133 is not intended to control the emissions of pathogens from composting operations as the regulation of such emissions are not within the District's regulatory authority.

b. Bioaerosols

Bioaerosols (organisms or biological agents in air that affect human health) are a concern in compost emissions. The most widely studied bioaerosol is *Aspergillus fumigatus (A. fumigatus)*, a fungal spore. Endotoxins (non-living components of cell walls of gram negative bacteria) and organic dust (such as pollens) are also bioaerosols. Studies have shown that *A. fumigatus* is ubiquitous in the environment, meaning it is everywhere. *A. fumigatus* thrives in the environment created during composting. These fungi are found everywhere where the right conditions exist (compost piles, wood chip piles, potted plants), not just in biosolids operations. Biofilters used to control odors from the composting facility can themselves give off the same bioaerosols generated during the composting process. The organism is generally considered a secondary pathogen, adversely affecting the infirmed or immune compromised

[12] California State Water Resources Control Board, *General Waste Discharge Requirements for Biosolids Land Application*, Draft Statewide Program EIR (February 2004), pg. 5-21.

individual. Although this fungus spore is generated in large quantities in compost, the numbers of spores usually do not measure above normal background levels at distances of more that 250-500 feet from the composting site according to a report prepared by the County of Los Angeles Department of Health Services.[13]

These contaminants would be primarily of concern to workers at composting facilities and are generally not present in quantities that would cause reactions in most humans. Health effects to compost facility workers have not been readily apparent in studies conducted to identify such effects (Epstein *et al*., 1998.). According to a technical bulletin from the California Integrated Waste Management Board titled "*Aspergillus, Aspergillosis, and Composting Operations in California*",[14]

> *One should recognize that composting facilities do represent sites where there is a massive culturing of Aspergillus fumigatus organisms in relatively small areas compared to most "natural" or background circumstances. Thus, without dust control, there is an elevated risk of exposure to spores for workers at compost facilities. In a worst-case scenario, a respiratory model developed by Boutin et al. (1987) estimated that a completely unprotected worker shoveling mature compost at a highly contaminated site could inhale 25,000 to 30,000 viable spores per hour. However, elevated exposure is not automatically synonymous with an elevated health risk for compost workers (or neighboring communities). Epstein (1993) discusses several composting facilities in the USA in which health monitoring (physical exams) of compost workers has been conducted; the results of the physical exams did not reveal any illnesses directly associated with composting. As discussed in Section 6, dust exposures at composting facilities are readily controllable, and control benefits and protects both facility workers and nearby residences.*
>
> *However, many public health specialists, scientists, and engineers in North America and Europe believe that properly operated composting and co-composting operations present little health risk to normal compost facility employees, and negligible if any risk for nearby residences (Millner et al. 1977, Clark et al. 1983, Epstein*

[13] County of Los Angeles Department of Health Services, *Public Health Issues Regarding Proposed Wheelabrator Clean Water Systems (Bio Gro) Sewage Sludge Composting Facility* (January 11, 1997), pg. 3.
[14] California Integrated Waste Management Board, *Aspergillus, Aspergillosis, and Composting Operations in California* (December 16, 1993), pg. 10.

and Epstein 1985, Boutin and Moline 1987, Maritato et al. 1992). Diaz et al. (1992) stated:

The existence of hazard from the spores of A. fumigatus [at commercial composting facilities] is yet to be demonstrated. The infectivity of the spores is low. Consequently, any danger posed by it would be of significance only to the unusually susceptible individual. Nevertheless, prudence indicates that an open-air compost plant should not be sited in close proximity to human habitations.

There have only been a few reported cases of biosolids-related illnesses as a result of the fungus *Aspergillus fumigatus*. There have been reported cases of fungal allergies and possible outbreaks of asthma near composting operations.[15] Proposed Rule 1133 is not intended to control emissions of bioaerosols from composting operations as the regulation of such emissions are not within District's regulatory authority.

6. Odors

Composting operations produce odors. Odors generated by the biosolids treatment process may be perceived as unhealthy due to the origin of the solids. Odors may also decrease public support for biosolids recycling programs. As biosolids degrade, the most offensive odorous compounds formed are organic and inorganic forms of sulfur, ammonia, amines, organic fatty acids, and hydrocarbons. Odors will vary depending on the type of residual solids processed and the method of processing. The main factors affecting the generation of odor are identified as: the proper mixing of the feedstock (bulking agent and biosolids), the choice of feedstock, prevention of anaerobic conditions within the compost pile and the prevention of liquid ponding at the facility.

The District has limited authority over odors from the composting source category. In fact pursuant to H&S Code §41705(a)(3) the nuisance provisions contained in the H&S Code specifically do not apply to such operations. This code section also renders District Rule 402 – *Nuisance* inapplicable in regards to odors from composting operations. H&S Code §41705(b) requires the District to forward any odor nuisance complaints to the proper local enforcement agency. Therefore, proposed Rule 1133 can not and does not attempt to regulate odor emissions.

C. CONTROL REQUIREMENTS

Control requirements are in the form of Best Management Practices (BMPs) and a contingency measure. Since the control requirements applicable to a single source

[15] California State Water Resources Control Board, *General Waste Discharge Requirements for Biosolids Land Application*, Draft Statewide Program EIR (February 2004), Chapter 5.

category, composting operations, they are by definition more stringent than the current limited regulation provided by District Rule 402 – *Nuisance* and Rule 403 – *Fugitive Dust.*

D. PROPOSED RULE SUMMARY

Proposed Rule 1133 – *Composting and Related Operations* applies to new and existing Chipping and Grinding activities, and new and existing Composting and Related Operations within the MDAQMD. It is formatted in standard MDAQMD rule format including sections containing Purpose, Applicability, Exemptions, Definitions, Requirements, Monitoring and Records, Compliance Procedures and Test Methods, and Violations.

Proposed Rule 1133 was designed to enable the District to comply with the provisions of H&S Code §39614(d) that requires the adoption of the most readily available, feasible and cost-effective control measures for PM as set forth on a list developed by CARB.[16] This list was developed based on rules, regulations, and programs existing in California as of 01/01/04. There are three South Coast Air Quality Management District (SCAQMD) Rules listed as potential local control measures contained in the CARB document. Specifically, Appendix B of the CARB document *Proposed List of Measures to Reduce Particulate Matter*, Strategy E – *Composting and Related Operations* (Measures reduce ammonia and VOC) items 54, 55, and 56, refer to these three SCAQMD rules which were adopted on January 10, 2003: Rule 1133 – *Composting and Related Operations – General Administrative Requirements*, Rule 1133.1 – *Chipping and Grinding*, and Rule 1133.2 – *Emission Reductions From Co-Composting Operations*. The District has analyzed these SCAQMD Rules to determine if the measures they contained were readily available, feasible and cost-effective for implementation within the MDAQMD. This analysis may be found in the Technical Discussion.

In addition to the SCAQMD Rules, the SJVAPCD adopted Rule 4565 – *Biosolids, Animal Manure, and Poultry Litter Operations* on March 15, 2007. While this Rule was adopted subsequent to the CARB list, it represents similar, suitable levels of control as imposed by the SCAQMD Rules and was therefore considered as an additional reference by the District. Furthermore, the Southwest Clean Air Agency (SWCAA), which is responsible for enforcing federal, state, and local air quality standards in southwest Washington State, permitted the Little Hanaford Farms Composting Facility and identified several general process controls. While this determination was also not referenced by the CARB list, it identifies controls imposed by the SJVAPCD Rule and was therefore considered as an additional reference. An analysis of this Rule and the SWCAA documents are also found in the Technical Discussion.

[16] A copy of the CARB "Proposed List of Measures to Reduce Particulate Matter – PM10 and PM2.5 (Implementation of Senate Bill 656, Sher 2003) and attendant staff report may be found at: http://www.arb.ca.gov/pm/pmmeasures/pmmeasures.htm .

Based upon the feasibility and cost-effectiveness analysis contained in the Technical Discussion, the contents of proposed Rule 1133 were specifically derived from South Coast Air Quality Management District (SCAQMD) Rules 1133 – *Composting and Related Operation, General Administrative Requirements* (requirement section (C)(1)), Rule 1133.1 – *Chipping and Grinding Activities* (requirement section (C)(2)), and Rule 1133.2 – *Emission Reduction from Co-Composting Operations* that were adopted on 01/10/03. San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4565 – *Biosolids, Animal Manure, and Poultry Litter Operations* adopted 03/15/2007 was also used. Rule 1133 is not intended to be submitted as part of the State Implementation Plan.

E. SIP HISTORY

1. SIP History

a. SIP in the San Bernardino County Portion of MDAQMD

There is no equivalent document to Rule 1133 currently in the MDAQMD SIP.

b. SIP in the Riverside County (Blythe/Palo Verde Valley) Portion of the MDAQMD

There is no analogous rule to proposed Rule 1133 inherited from the SCAQMD in the SIP for the Blythe/Palo Verde Valley portion of the MDAQMD.

2. SIP Analysis

This Rule will not be submitted for inclusion in the SIP for the San Bernardino County portion of the MDAB and the Blythe/Palo Verde Valley portion of Riverside County. There is no direct federal requirement to adopt regulations regarding composting operations. In addition, the District has not identified the control of composting operations in its PM_{10} planning documents as a control measure necessary to attain the NAAQS. Therefore, proposed Rule 1133 is not required to be submitted as an element of the State Implementation Plan (SIP) at this time.

However, if the District is in the future designated nonattainment for the Federal $PM_{2.5}$ NAAQS this Rule may need, in the future, to become federally enforceable. Therefore, the District is adopting this Rule in accordance with federal procedures to enable such submission to be made in the future.

Appendix "A"
Rule 1133 – *Composting and Related Operations* Draft Version

Rule 1133 is a new Rule. A copy is included herein for reference. The redline version of Rule 1133 noting changes from the preliminary draft rule is available on request:

1. Normal text identifies the language of the rule which is proposed for adoption.

2. *[Bracketed italicized text]* is explanatory material that is not part of the proposed language. It is removed once the proposed rule is adopted.

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Rule 1133
Composting and Related Operations

(A) General

(1) Purpose

(a) The purpose of this rule is to:

(i) Limit emissions of volatile organic compounds (VOC) and ammonia from Composting and related operations. *[derived from SCAQMD Rule 1133.2(a)]*

(ii) Prevent inadvertent decomposition occurring during Chipping and Grinding operations; and *[derived from SCAQMD Rule 1133.1(a)]*

(iii) Create an emissions-related informational database on Composting and related operations through administrative requirements as part of a Composting registration program. *[derived from SCAQMD Rule 1133(a). Grammar correction pursuant to 08/06/08 comment letter section (IV)(A) received from Ingrid Brostrom, Staff Attorney for Center on Race, Poverty & the Environment)]*

(2) Applicability

(a) This rule applies to new and existing Chipping and Grinding activities, and new and existing Composting and related operations. *[derived from SCAQMD Rule 1133(b), 1133.1(b) and 1133.2(b)]*

(3) Exemptions

(a) The provisions of section (C)(1) of this rule shall not apply to the following facilities and/or operations: *[derived from SCAQMD Rule 1133(g)]*

(i) Portable Chipping and Grinding;
(ii) Agricultural Composting;
(iii) Nursery Composting;
(iv) Recreational Facilities Composting;
(v) Backyard Composting;
(vi) Woodwaste Chipping and Grinding facilities;
(vii) Greenwaste derived from the site and used on-site; and

(viii) Emergency operations performed in response to a State- or federally- declared emergency. *[derived from comment received at Public Workshop]*

(b) The provisions of sections (C)(2)(a)(ii), (C)(2)(a)(iii), (C)(2)(a)(iv), and (C)(2)(a)(v) of this rule shall not apply to the following: *[derived from SCAQMD Rule 1133.1(f)(2). Rule citation corrected pursuant to 08/06/08 comment letter section (IV)(B) received from Ingrid Brostrom, Staff Attorney for Center on Race, Poverty & the Environment]*

(i) Chipping and Grinding activities of Greenwaste derived from the site and used on-site;
(ii) Portable Chipping and Grinding;
(iii) Agricultural Chipping and Grinding;
(iv) Landclearing Chipping and Grinding;
(v) Woodwaste Chipping and Grinding;
(vi) Palm Chipping and Grinding activities; and
(vii) Emergency operations performed in response to a State- or federally- declared emergency. *[derived from comment received at Public Workshop]*

(c) The provisions of section (C)(2)(a) of this rule shall not apply to chipped and ground curbside waste provided the moisture content of such waste is less than thirty percent (30%) measured in accordance with section (E)(1) and the moisture content measurements are maintained on-site in accordance with section (C)(2)(b)(v). *[derived from SCAQMD Rule 1133.1(f)(3). Rule citation corrected pursuant to 08/06/08 comment letter section (IV)(B) received from Ingrid Brostrom, Staff Attorney for Center on Race, Poverty & the Environment, and Ross May at TAC meeting]*

(d) The provisions of section (C)(3) of this rule shall not apply to Co-Composting Operations with a design capacity of less than 1,000 tons Throughput per year. *[derived from SCAQMD Rule 1133.2 (j)(1). Modified pursuant to comment received at Public Workshop]*

(B) Definitions

For purposes of this rule, the following definitions shall apply:

(1) Active Compost – Compost Feedstock that is in the process of being rapidly decomposed and is unstable. Active Composting lasts until one of the following conditions is met: *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(1), SCAQMD Rule 1133.2(c)(3), SJVAPCD 4565(3.1)]*

(a) Product respiration rate is above 10 milligrams of oxygen consumed per gram of volatile solids per day as measured by direct respirometry. *[derived from SCAQMD Rule 1133.2(c)(9)]*

(b) The organic material emits no more than seven (7) mg carbon dioxide per gram of organic material per day as measured using test method in section (E)(3)(a). *[derived from SJVAPCD 4565 3.1]*

(c) The material has a Solvita Maturity Index of five (5) or greater as measured using the test method in section (E)(3)(b). *[derived from SJVAPCD 4565 3.1. Rule reference corrected pursuant to comment from Ross Mat at TAC Meeting]*

(d) The material has been Composted for a period of at least 22 consecutive days. *[derived from SJVAPCD 4565 3.1]*

(2) Agricultural Composting – Composting conducted in agricultural settings where the Feedstock consists of wastes generated on-site by the production and processing of farm or agricultural products to be used on-site. *[derived from SCAQMD Rule 1133(c)(1)]*

(3) Air Pollution Control Officer (APCO) – The person appointed to the position of Air Pollution Control Officer of the District pursuant to the provisions of California Health and Safety Code §40750, and his or her designee. *[Derived from MDAQMD Rule 1301]*

(4) Backyard Composting – Composting conducted by a household, including but not limited to, single family residences, duplexes or apartment buildings, generated on-site to be used on-site. *[derived from SCAQMD Rule 1133(c)(2)]*

(5) Best Management Practice – A best management practice is a technique or methodology that, through experience and research, has proven to reliably lead to a desired result. Composting best management practices are Composting parameters that minimize emissions by promoting aerobic Composting conditions. *[derived from Hanaford Farms Best Available Control Technology Determination and SJVUAPCD Rule 4565]*

(6) Biosolids – Solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Biosolids includes, but is not limited to, treated domestic septage and scum or solids removed in primary, secondary, or advanced wastewater treatment processes. Biosolids does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during the preliminary treatment of domestic sewage in a treatment works. *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(9)]*

(7) Bulking Agent – Additives or amendments mixed with Feedstock in order to adjust the moisture level, carbon to nitrogen ratio, or porosity to create a favorable condition. *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(2)]*

(8) Calendar Days – Any days of the year, excluding official federal and state holidays. *[Derived from SCAQMD Rule 1133.1(c)(2)]*

(9) California Air Resources Board (CARB) – The California State Air Resources Board the powers and duties of which are described in Part 2 of Division 26 of the California Health & Safety Code (commencing with section 39500). *[derived from MDAQMD Rule 1165]*

(10) California Integrated Waste Management Board (CIWMB) – The California Integrated Waste Management Board the powers and duties of which are primarily described in Chapter 3 of Part 1 of Division 30 of the California Public Resources Code. (commencing with section 40400).

(11) Chipping and Grinding – Activity that mechanically reduces the size of Greenwaste, Woodwaste, and/or Foodwaste. *[derived from SCAQMD Rule 1133(c)(3)]*

(12) Compost – The product resulting from the controlled biological decomposition of biological materials. *[Derived from SCAQMD Rule 1133.2(c)(7)]*

(13) Composting – Process in which solid organic waste materials are decomposed in the presence of oxygen under controlled conditions through the action of bacteria and other microorganisms. *[Derived from SCAQMD Rule 1133.2(c)(8)]*

(14) Compostable Material – Any organic material that when accumulated will become Active Compost as defined in section (B)(1). *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(11)]*

(15) Composting Operations – Facilities involved in Composting organic materials including, but not limited to, Greenwaste, Biosolids, Manure and Foodwaste. *[derived from SCAQMD Rule 1133(c)(7)]*

(16) Co-Composting – Composting where Biosolids and/or Manure are mixed with Bulking Agents to produce Compost. Co-Composting involves both the active and curing phase. *[derived from SCAQMD Rule 1133.2(c)(6)]*

(17) Curbside Greenwaste – Greenwaste that is collected from receptacles designated for residential household Greenwaste. Curbside Greenwaste also includes screened Curbside Greenwaste containing only grass clippings, leaves, and/or twigs that is not considered Greenwaste in (B)(24). *[derived from SCAQMD Rule 1133.1(c)(5)]*

(18) Curing Compost – The phase of the Co-Composting process that begins immediately after the end of the active phase of Composting. Curing Composting lasts until one of the following conditions is met:

(a) Product respiration rate is below 10 milligrams of oxygen consumed per gram of volatile solids per day as measured by direct respirometry. *[derived from SCAQMD Rule 1133.2(c)(9)]*

(b) Emits no more than four (4) mg CO_2-C per gram of organic material per day, as measured using the test method in section (E)(3)(a). *[derived from SJVUAPCD Rule 4565 3.21. Rule reference corrected pursuant to comment from Ross Mat at TAC Meeting]*

(c) The Compost has a Solvita Maturity Index of 7 or greater, as measured using the test method in section (E)(3)(b); or *[derived from SJVAPCD Rule 4565(3.17.2). Rule reference corrected pursuant to comment from Ross Mat at TAC Meeting]*

(d) The material has been Composted at least 40 consecutive Calendar Days after the Active Composting phase. *[derived from SJVAPCD Rule 4565(3.17.3)]*

(19) District – The Mojave Desert Air Quality Management District, the geographical area of which is described in District Rule 103. *[derived from MDAQMD Rule 103]*

(20) Facility – A portion of real property that is on one or more contiguous or adjacent properties, all of which are under common ownership or control. *[derived from SJVUAPCD Rule 4565 3.20]*

(21) Feedstock – Any Compostable organic material used in the production of Compost or chipped and ground material including, but not limited to, agricultural material, Greenwaste, Foodwaste, Biosolids, and mixed solid waste. Feedstocks shall not be considered as Bulking Agents. *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(19)]*

(22) Finished Compost – A humus-like material that meets at least one of the following conditions: *[derived from SJVUAPCD Rule 4565 3.21]*

(a) Emits no more than four (4) mg CO_2-C per gram of organic material per day, as measured using the test method in section (E)(3)(a). *[Rule reference corrected pursuant to comment from Ross Mat at TAC Meeting]*

(b) Has a Solvita Maturity Index of 7 or greater, as measured using the test method in section (E)(3)(b). *[Rule reference corrected pursuant to comment from Ross Mat at TAC Meeting]*

(c) Has completed both the active and curing phases of Composting.

(23) Foodwaste – Any food scraps collected from the food service industry, grocery stores, or residential food scrap collection. Foodwaste mixed with Greenwaste is considered Foodwaste. *[derived from SCAQMD Rule 1133(c)(8)]*

(24) Greenwaste – Organic waste material generated from gardening, agriculture, or landscaping activities including, but not limited to, grass clippings, leaves, tree

and shrub trimmings, and plant remains. *[derived from SCAQMD Rule 1133(c)(9)]*

(25) Local Enforcement Agency (LEA) – The local agency designated as the enforcement agency by the CIWMB pursuant to Article 1 of Chapter 2 of Part 4 of Division 30 of the California Public Resources Code (commencing with section 43200).

(26) Manure – Accumulated herbivore or avian excrement which includes feces, urine, any bedding material, spilled feed, or soil that is mixed with feces or urine. *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(25)]*

(27) Mixed Greenwaste – Curbside Greenwaste that is mixed with Non-Curbside Greenwaste. *[derived from SCAQMD Rule 1133.1(c)(10)]*

(28) Non-Curbside Greenwaste – Greenwaste that is not collected from receptacles designed for residential household Greenwaste. Curbside Greenwaste or Mixed Greenwaste that is screened and contains only large woody material (larger than 3 inches in any dimension) such as tree trimmings and branches is also considered to be Non-Curbside Greenwaste. *[derived from SCAQMD Rule 1133.1(c)(11)]*

(29) Nursery Composting – Composting conducted at a nursery using Feedstock generated on-site to produce Compost for on-site use. *[derived from SCAQMD Rule 1133(c)(10)]*

(30) Operator – Any person who owns, leases, supervises, or operates a Facility that processes Compost or Co-Compost, or equipment on such a Facility. *[derived from SJVUAPCD Rule 4565 3.28]*

(31) Palm Chipping and Grinding – Any activity that mechanically reduces the size of palm tree waste. *[derived from SCAQMD Rule 1133.1(c)(12)]*

(32) Portable Chipping and Grinding Operation – Chipping and Grinding equipment operating under a state or local portable permit or otherwise exempt from permitting.

(33) Pile – Compost material that is heaped together. *[derived from SJVUAPCD Rule 4565 3.30]*

(34) Rainy Day – Any day with at least 0.05 inches of rain reported by the National Weather Service or a cooperative weather reporting station for the site closest to where the Chipping and Grinding activity occurs. *[derived from SCAQMD Rule 1133.1(c)(14)]*

(35) Recreational Facilities Composting – Composting conducted at parks, arboretums and other recreational facilities using Feedstock generated on-site to produce Compost for on-site use. *[derived from SCAQMD Rule 1133(c)(16)]*

(36) Solvita Maturity Index – An index that defines the stage where Compost exhibits resistance to further decompositions, as tested by the Solvita Maturity Test. *[derived from SCAQMD Rule 1133.2(c)(10)]*

(37) Throughput – The mass of Biosolids, Manure, or Greenwaste in tons per year as received by the Facility and processed through Composting excluding recycled materials. *[derived from SCAQMD Rule 1133.2(c)(18)]*

(38) Tipping Fees – Money or other financial benefits received by a Facility, owner, or Operator in exchange for the Facility, owner, or Operator accepting Greenwaste, Biosolids, animal Manure, or poultry litter. *[derived from SJVUAPCD Rule 4565 3.34]*

(39) TMECC – Test Methods for the Examination of Compost and Composting by the US Composting Council Research and Education Foundation. *[derived from SJVUAPCD Rule 4565 3.35]*

(40) United States Environmental Protection Agency (USEPA) – Refers to the Administrator or the appropriate designee of the United States Environmental Protection Agency. *[derived from MDAQMD Rule 1201]*

(41) Volatile Organic Compound (VOC) – Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and those compounds listed in 40 CFR 51.100(s)(1). *[derived from MDAQMD Rule 1162(b)(48)]*

(42) Wet Weather Conditions – Weather conditions following a Rainy Day not to exceed 10 days. *[derived from SCAQMD Rule 1133.1(c)(15)]*

(43) Woodwaste – Lumber and the woody material portion of mixed demolition wastes and mixed construction wastes. *[derived from SCAQMD Rule 1133(c)(13)]*

(C) Requirements

(1) General Administrative Requirements: *[derived from SCAQMD Rule 1133(d)]*

(a) Any person engaged in Chipping and Grinding and Composting Operations shall:

(i) No later than 60 days after rule adoption, Operators of any existing Chipping and Grinding activities and Composting Operations shall register with the District by submitting complete and applicable information required in accordance with section (C)(1)(b) of this rule.

(ii) Prior to start of operation, Operators of new Chipping and Grinding activities and Composting Operations shall register with

the District by submitting complete and applicable information required in accordance with section (C)(1)(b) of this rule.

(iii) No later than July 1 of every year thereafter, Operators of Chipping and Grinding activities and Composting Operations registered with the District shall update their registration information by providing any changes to the information submitted in accordance with section (C)(1)(b) of this rule.

(b) The registration and annual update shall at a minimum include the following information:

(i) Facility name;
(ii) Facility location address and mailing address;
(iii) Facility legal owner(s), contact person, title, telephone number, and mailing address;
(iv) Facility Operator(s), contact person, title, telephone number, and mailing address;
(v) Number of employees at the Facility;
(vi) Applicable California Integrated Waste Management Board's permit number;
(vii) Type and amount of materials received and type and amount of products produced for the preceding year;
(viii) Facility design capacity (Throughput) in tons per year;
(ix) Facility actual Throughput in tons per month for the preceding calendar year. For new facilities, projected Throughput must be provided;
(x) Feedstock description;
(xi) Facility process description including, process diagram and a description of Chipping and Grinding operations and Compost methods used (if applicable);
(xii) Published tipping fee schedule for the preceding calendar year by Feedstock; and
(xiii) Number of air-quality related enforcement actions issued in writing against the Facility by the Local Enforcement Agency and the California Integrated Waste Management Board for the preceding year.

(2) Chipping and Grinding Operation Requirements:

(a) Any person engaged in a chipping or grinding activity shall:

(i) Remove Foodwaste from the site or use Foodwaste for on-site Composting within two Calendar Days of receipt. *[Derived from SCAQMD Rule 1133.1(d)(1)]*
(ii) Chip or grind, or use on-site, or remove Curbside Greenwaste from the site within three Calendar Days. *[Derived from SCAQMD Rule 1133.1(d)(2)]*

(iii) Chip or grind, or remove Non-Curbside Greenwaste from the site within 14 Calendar Days of receipt. *[Derived from SCAQMD Rule 1133.1(d)(3)]*

(iv) Chip or grind, or use on-site, or remove Mixed Greenwaste from the site within seven Calendar Days of receipt. *[Derived from SCAQMD Rule 1133.1(d)(4)]*

(v) Remove chipped or ground Curbside Greenwaste from the site or use chipped or ground Curbside Greenwaste on-site within three Calendar Days of being chipped and ground. *[Derived from SCAQMD Rule 1133.1(d)(5)]*

(b) Any person engaged in a chipping or grinding activity shall maintain the following records: *[Derived from SCAQMD Rule 1133.1(d)(6)]*

(i) A copy of the Facility's District registration and annual updates submitted in compliance with section (C)(1).

(ii) Records of date, type, and amount of Greenwaste and/or Foodwaste received; and

(iii) Records of date, type, and amount of Greenwaste and or Foodwaste removed from the site, and location where they were transferred to.

(iv) Records of dates of Rainy Days and Wet Weather Conditions and description of specific conditions that limited normal operations.

(v) Records of moisture content measurements as determined in section (E)(4)(b).

(vi) Records of dates and amount of Curbside Greenwaste chipped and ground.

(c) The time requirements in sections may be extended by the number of Rainy Days and Wet Weather Conditions that impede normal Chipping and Grinding operations providing that records are maintained in accordance with section (C)(2)(b). *[Derived from SCAQMD Rule 1133.1(d)(7). Rule citation corrected pursuant to 08/06/08 comment letter section (IV)(B) received from Ingrid Brostrom, Staff Attorney for Center on Race, Poverty & the Environment]*

(3) Co-Composting Operations General Process Controls (Best Management Practices) Requirements: *[reference to "Composting" removed because SCAQMD Rule 1133.2 and SJVUAPCD Rule 4565 BMPs only apply to co-composting pursuant to 08/08/08 comment letter section received from California Waste Management Board]*

(a) Any person engaged in Co-Composting operations shall: *[typographical error. Did not carry down change from (C)(3) to apply only to Co-composting]*

Deleted: Composting or

(i) Scrape or sweep, at least once a day, all areas where Compostable Material is mixed, screened, or stored such that no Compostable

Material greater than one inch (1") in height is visible in the areas scraped or swept immediately after scraping or sweeping, except for Compostable Material in process Piles or storage Piles; and *[derived from SJVUAPCD Rule 4565 Table 2]*

(ii) Establish initial carbon to nitrogen ratio of not less than 20:1 in Active Compost Piles by testing the material when it is prepared for Active Composting using the test method in section (E)(4)(c). Testing shall be done on the day the materials are mixed and be representative of the initial composition of each new Active Compost Pile; and *[derived from SCAQMD Technology Assessment for Emission Reductions From Composting and Related Operations, March 22, 2002(upper limit) and SJVUAPCD Rule 4565 Table 2(lower limit)]*

(iii) Maintain moisture content between 40 percent to 70 percent and test daily in Active Piles and monthly in Curing Piles, or Cover Active and Curing Piles within three hours of turning with one of the following: *[derived from SJVUAPCD Rule 4565 Table 2]*

a. A waterproof covering; or
b. At least six inches (6") of Finished Compost; or
c. At least six inches (6") of soil.

(iv) Maintain pH below 8.0 and test monthly in active and curing Piles; and *[derived from SCAQMD Technology Assessment for Emission Reductions From Composting and Related Operations, March 22, 2002]*

(v) Adequately mix incoming Feedstock so that moisture and nutrients are maintained in proper proportions in all parts of the Composting Piles. *[derived from Technical Support Document Little Hanaford Farms , Southwest Clean Air Agency, pg. 8]*

(b) Maintain daily records of materials receipt, discharge, and operational activities sufficient to verify the requirements of (C)(3)(a), and on a daily basis, the operator shall record the quantity of materials received that would be used for the Compost or Co-Compost operation. These materials include, but are not limited to, material that may be recovered from the composting process for re-use in another batch of Compostable Material, Biosolids, Manure, and Greenwaste. *[derived from SJVUAPCD Rule 4565 6.1.4.1]*

(c) If a tested parameter is found to be outside applicable limits specified in section (C)(3)(a)(ii), (C)(3)(a)(iii), or (C)(3)(a)(iv), the Operator shall take remedial action within 24 hours of discovery to bring Pile characteristics within the specified limits. *[derived from SJVUAPCD Rule 4565 5.3.6]*

(4) Contingency Measure

(a) The requirements of this section only apply if USEPA makes a finding, as evidenced by publication in the Federal Register, that the District (or

portion thereof) has been designated as a non-attainment area for the $PM_{2.5}$ National Ambient Air Quality Standard.

(b) Any Composting operation accepting more than 100,000 wet tons of Compostable Material per year shall be equipped with capture and control equipment achieving a minimum 80 percent (by weight) overall control efficiency for VOC and ammonia. *[derived from MDAQMD Technical Report, H & S Code §39614 Feasibility Analysis for Composting and Related Operations, Staff Recommendation. Clarification made pursuant to comment from Ross May at TAC Meeting, and letter received 08/07/08 from Lynda L. Brothers of LBrothersLaw]*

(D) Monitoring and Records

(1) The operator shall, at a minimum, maintain operations records for a period of at least five years, and make them available to the APCO upon request. *[Derived from SCAQMD Rule 1133.2(h). Change pursuant to comment received at Public Workshop.]*

(E) Compliance Procedures and Test Methods

(1) Measurements of Piles and Windrows shall be determined by collecting at least 10 samples from various locations of the Pile or Windrow at a depth of at least 12 inches below the Pile or Windrow surface.

(2) Samples shall be mixed thoroughly and analyzed for moisture content by ASTM method D4442, ASTM method D4444, or ASTM method E871-82. *[Derived from SCAQMD Rule 1133.1(e)]*

(3) Compost Maturity/Stability Test Methods *[derived from SJVUAPCD Rule 4565 6.2.1]*

(a) TMECC Method 05-08-B (Carbon Dioxide Evolution Rate); or

(b) TMECC Method 05-08 E (Solvita Maturity Test®)

(4) Best Management Practices Test Methods *[derived from SJVUAPCD Rule 4565 6.2.2]*

(a) Oxygen Concentration – TMECC Method 05.08-C (In-Situ Oxygen Refresh Rate)

(b) Moisture Content – TMECC Method 03.09-A (Total Solids and Moisture at 70±5 degrees Centigrade)

(c) Carbon to Nitrogen Ration – TMECC Method 05.02-A (Carbon to Nitrogen Ratio)

(d) pH – TMECC Method 04.11-A

(5) Contingency Measure Test Methods

(a) VOC – USEPA Method 18 and USEPA Method 25, or equivalent.

(b) Ammonia – South Coast Air Quality Management District Method 207.1 – Determination of Ammonia Emissions from Stationary Sources, or equivalent.

(6) Alternative Compliance Methods

(a) Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with any provisions of this rule may also be used after review and approval in writing by the APCO and CARB. *[derived from MDAQMD Rule 1165]*

(F) Violations

(1) Failure to comply with any provision of this Rule shall constitute a violation of the Rule.

(2) A violation of the limits contained in this Rule as determined by any one of these test methods shall constitute a violation of this Rule.

(3) When more than one test method or set of test methods are specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

[SIP: Not SIP.]

Appendix "B"

Public Notice Documents

1. Proof of Publication – Daily Press
2. Proof of Publication – Riverside Press-Enterprise

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PROOF OF PUBLICATION

(2015.5 C.C.P.)

STATE OF CALIFORNIA,
County of San Bernardino

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the publisher of the DAILY PRESS, a newspaper of general circulation, published in the City of Victorville, County of San Bernardino, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of San Bernardino, State of California, under the date of November 21, 1938, Case number 43096, that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

September 26

All in the year 2008.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated this: 26th **day of** September, **2008**

Signature

Leslie Jacobs

This space is the County Clerk's Filing Stamp

FILED
MOJAVE DESERT AQM
CLERK OF THE BOAR
07 2008

BY:

Proof of Publication of

NOTICE OF HEARING

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that the Governing Board of the Mojave Desert Air Quality Management District (MDAQMD) will conduct a public hearing on October 27, 2008 at 10:00 A.M. to consider the proposed adoption of Rule 1133 - Composting and Related Operations.

SAID HEARING will be conducted in the Governing Board Chambers located at the MDAQMD offices 14306 Park Avenue, Victorville, CA 92392-2310, where all interested persons may be present and be heard. Copies of proposed Rule 1133 - Composting and Related Operations and the Staff Report are on file and may be obtained from the Clerk of the Governing Board at the MDAQMD Offices. Written comments may be submitted to Eldon Heaston, Deputy APCO at the above office address. Comments must be received no later than October 27, 2008 to be considered. If you have any questions you may contact Tracy Walters at (760) 245-1661, extension 6122 for further information.

The adoption of proposed Rule 1133 is necessary to satisfy the provisions of Health & Safety Code §39614(d) which requires the adoption of readily available, feasible and cost-effective control measures for particulate matter from a list of potential local control measures promulgated by CARB. The level of control contained in proposed Rule 1133 has been determined to be readily available, feasible and cost-effective based upon an analysis and recommendations made in the Health & Safety Code §39614 Feasibility Analysis for Composting and Related Operations that was received and filed by the MDAQMD Governing Board on 10/22/2007.

[redacted] determined that a Categorical Exemption (Class 8 - 14 Cal. Code Reg §15308) applies and has prepared a Notice of Exemption for this action.

Michele Baird
Clerk of the Board
Mojave Desert Air Quality Management District

Published in the Daily Press
September 26, 2008
(F-74)

THE PRESS-ENTERPRISE

3450 Fourteenth Street
Riverside CA 92501-3878
951-684-1200
951-368-9018 FAX

PROOF OF PUBLICATION
(2010, 2015.5 C.C.P.)

Press-Enterprise

PROOF OF PUBLICATION OF

Ad Desc.: Rule 1133

I am a citizen of the United States. I am over the age of eighteen years and not a party to or interested in the above entitled matter. I am an authorized representative of THE PRESS-ENTERPRISE, a newspaper of general circulation, printed and published daily in the County of Riverside, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of Riverside, State of California, under date of April 25, 1952, Case Number 54446, under date of March 29, 1957, Case Number 65673 and under date of August 25, 1995, Case Number 267864; that the notice, of which the annexed is a printed copy, has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to wit:

09-26-08

I Certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date: Sep. 26, 2008
At: Riverside, California

MOJAVE DESERT AQMD

14306 PARK AVE
ATTN: MICHELE BAIRD
VICTORVILLE CA 92392

Ad #: 9487052

PO #:

Agency #: _____

Ad Copy:

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Pursuant to the California Environmental Quality Act (CEQA) the MDAQMD has determined that a Categorical Exemption (Class 8 - 14 Cal. Code Reg §15308) applies and has prepared a Notice of Exemption for this action.

Michele Baird
Clerk of the Board
Mojave Desert Air Quality Management District
9/26

FILED
MOJAVE DESERT AQ
CLERK OF THE BO
07 2008
BY

Appendix "C"

Public Comments and Responses

1. Barstow Heights Community Services District Resolution 2006-2 in Opposition to Nursery Products, LLC, Biowaste Facility in Hinkley, 10/23/2006
2. Hinkley School Letter to the Editor (Desert Dispatch), 03/07/2007
3. Governing Board presentation by Chris Seney, Environmental Engineer for Nursery Products, 06/23/2008
4. Letter from Jeffrey Quillinan, 07/09/2008
5. Letter from Manuel Gilbert Gurule, 07/10/2008
6. Letter from Gordon & Rose McCain, 07/11/2008
7. Letter from Nancy Dittman, 07/17/2008
8. Letter from Mark Orr, 07/23/2008
9. Letter from Michael J. Hardy, Vice-President California Bio-Mass, Inc., 07/25/2008
10. Letter from Craig Schneider, President Helendale Community Services District, 07/28/2008
11. Letter from Richard P. Jacobs, President of the Board & Debbie Garvin, General Manager, Barstow Heights Community Services, 07/28/2008
12. Letter from Rob Malouf, President Board of Directors Silver Lakes Association, 07/28/2008
13. Letter from Nyla & Robert Kolterman, 07/28/2008
14. Letter from William & Sandra Nunn, 07/28/2008
15. Letter from Edward Riddle & Miriam Shulman, 08/04/2008
16. Electronic mail from Ingrid Brostrom, Staff Attorney Center on Race, Poverty & the Environment, 08/06/2008
17. Electronic mail from Linda L. Brothers, LBrothersLaw, 08/07/2008
18. Letter from Howard Levenson, Ph.D., Director, Sustainability Program, California Integrated Waste Management Board, 08/08/2008
19. Letter from Tricia & Norm Sheppeard, 08/18/2008
20. Oral Comments received at Public Workshop, 08/18/2008
21. Oral Comments received at Public Workshop, 08/19/2008
22. Oral Comments received at Public Workshop, 08/20/2008
23. Oral Comments received at Public Workshop, 08/21/2008
24. Comments from Maureen Reilly, Sludge Watch, 08/21/2008
25. Letter from Susan Levine, Interim Superintendent Barstow Unified School District, 08/26/2008
26. Electronic mail from Peg Diaz, 08/25/2008 (duplicate email from D. Norman Diaz 08/26/2008)
27. Series of Electronic mail #1 – #19 from D. Norman Diaz, 08/08/2008 through 08/26/2008
28. Electronic mail from Norman Diaz, 08/15/2008

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Public Comment Letter 1

BARSTOW HEIGHTS COMMUNITY SERVICES DISTRICT
RESOLUTION 2006-2
IN OPPOSITION TO NURSERY PRODUCTS, LLC, BIOWASTE FACILITY IN HINKLEY, CA

WHEREAS, Nursery Products, LLC, wishes to establish a biowaste facility in Hinkley, California; and

WHEREAS, for the sake of our citizens, we need to stop the horrific health hazard before it begins and establishes a foothold in our community; and

WHEREAS, open air biowaste operations were stopped and removed from Adelanto and from Newberry Springs, California, only after years of effort and time by the citizens of those communities; and

WHEREAS, the process of open air composting of biowaste is very bad for air quality. The pathogens and microbes in the sewage sludge will become airborne as the material is mixed, sifted, stirred, and turned over during the 60 day "composting" process; and

WHEREAS, the amount of material to be processed is extremely large (522 truck load trips, seven days a week, in wind and rain conditions); and

WHEREAS, the facility will most likely expand due to profitability and lack of other areas that will allow this to be done; and

WHEREAS, the consistently strong wind pattern is from the west and southwest, both of which will blow particles toward the Barstow Heights residents and beyond. The finished compost product will be stored on site in piles up to 50 feet tall. Again, this will blow in the wind towards Barstow Heights and beyond. The composting process releases a number of volatile chemicals, including ammonia, hydrogen sulfide, and other nitrogen and sulfur based compounds; and

WHEREAS, the additional hazardous waste truck traffic would also be a danger; and

WHEREAS, the facility has a great fire danger due to the heat from the composting process. It will be heated at 130 to 150 degrees for 60 days. This has led to spontaneous combustion and other means of starting a compost fire. It would be treated as a hazardous material fire and would need the HAZMAT teams from Hesperia to respond. There are no local or county HAZMAT teams.

NOW, THEREFORE, BE IT RESOLVED that the Barstow Heights Community Services District Board of Directors takes a stand in opposition to Nursery Products, LLC, Biowaste Facility being established in Hinkley, California, and requests support from state, county and local officials to help put a stop to this dreaded invasion of our environment.

ADOPTED by the Board of Directors this 23rd day of October, 2006, by the following Roll Call vote:

President Richard P. Jacobs	Aye
Vice President Barbara E. Kelley	Aye
Director Daryl Schendel	Absent
Director Stephen G. King	Aye
Director John A. Harper	Aye

Richard P. Jacobs, President

ATTEST: Debbie Garvin
Debbie Garvin, Secretary

District response to Public Comment Letter 1

The District appreciates the concern that the commenter has regarding the referenced proposed composting project. The specific concerns raised fall within the scope of the land use agency with approval authority over the referenced project (the County of San Bernardino) – not the District. With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project, not just those projects falling within the composting source category.

Public Comment Letter 2

Dennis M. Hirsch
Principal
37600 Hinkley Road
Hinkley, CA 92347
(760) 253-5514

Hinkley School **Better Schools Better Barstow**

March 7, 2007

Desert Dispatch
130 Coolwater Lane
Barstow, CA 92311

Letter to the Editor:

Tuesday, February 27, 2007. After more than four hours of testimony at a public hearing, four members of the County Board of Supervisors voted unanimously to approve an application from Nursery Products LLC to establish a sewage sludge composting plant eight miles west of Hinkley, California. How did the County Board of Supervisors reach this decision?

At the beginning of the public hearing, Supervisor Josie Gonzales stunned the 200 or so Hinkley citizens in the audience by disclosing that Nursery Products had donated $1,000.00 to her campaign. A demand from the audience that she recuse herself from voting on the application was ignored.

The other three supervisors did not disclose to the audience whether they received donations from Nursery Products. Are we to believe that only Supervisor Gonzales was singled out for such generous treatment? Would we be wrong to believe that such donations were for the purpose of gaining influence with the supervisors? We can only conclude that this purpose was achieved.

The fifty-nine citizens who spoke on behalf of Hinkley offered compelling reasons why the sewage sludge composting plant would be an environmental hazard to the community. Desert winds would blow the foul odors and bacteria-laden dust from this plant toward Hinkley and its school of 321 children. First-hand testimony was presented by a former administrator from the Adelanto School District, Aaron Haughton, on how the stench from a Nursery Products composting facility in that community made children sick at school. The composting facility in Adelanto was so mired with problems that the citizens of that community forced its closure. What would leave us to believe that Hinkley would not be subjected to the same kind of problems? Why did the Board of Supervisors ignore the Adelanto experience?

There are not sufficient fire department resources in the Hinkley area should a fire occur at this plant. An out-of-control fire would be an environmental disaster not only for Hinkley, but also Barstow and all of the High Desert.

Consider the armada of trucks that will carry sludge from Riverside County, Los Angeles, and points unknown to our environmentally clean High Desert. We are told that a sewage sludge composting plant is not harmful to the environment. If that is true, then why not establish composting facilities in the communities where the sludge is produced? Why incur the cost of transporting sludge to the High Desert?

Some Hinkley citizens proposed that if a composting plant was forced on our community, it should at least be an enclosed facility. Nursery Products officials said this option was too expensive even though enclosed composting facilities are now viewed as state-of-the-art. Why is the health of our citizens considered secondary to the cost of this facility?

The County Board of Supervisors owes us an answer. The County Board of Supervisors specified that the composting plant would be limited to 80 acres instead of 160. This is a somewhat meaningless limitation since the same amount of sludge will be piled in 80 acres that would have filled 160.

When the County Board of Supervisors finally voted to approve the application, Supervisor Mitzelfelt concluded by reading a prepared statement on the decision. A prepared statement? Does this mean that the County Board of Supervisors made a decision on the application prior to the public hearing? Was this a hearing that was no hearing?

Returning to our first question, how did the County Board of Supervisors reach this decision? This is about big business and big money taking advantage of a small, rural community that has no money. This is about the County Board of Supervisors siding with big business and big money over the safety and environmental concerns of its citizens. We trust the other citizens of San Bernardino County will take note.

Something stinks here and it's not just sludge.

Sincerely,

Dennis M. Hirsch
Principal, Hinkley School

District response to Public Comment Letter 2

The District appreciates the concern that the commenter has regarding a specific proposed composting project. The concerns raised by this letter fall within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District.

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Public Comment to Governing Board 3

Chris Seney
Victorville, CA

Good Morning and thanks for the opportunity to speak. I am the environmental engineer for Nursery Products.

On behalf of Nursery Products, I would like to comment on the contingency measure in section C (4) of the proposed 1133 rule. This contingency appears to be unlawful and not supported by MDAQMD analysis. The contingency attempts to determine NOW what might be the best available or best practicable technology at an indefinite time in the future. That indefinite future time is identified as a time when PM 2.5 non-attainment occurs. It is uncertain if or when that could happen. Therefore any evaluation of costs, alternative technologies or emission controls done now can only be speculative - and not sufficient to base a rule making upon. Further, the contingency measure hasn't been fully evaluated as to whether it is even responsive to the future, contingent event. The future event, non attainment for PM 2.5 may or may not occur and nowhere in the staff report is there a thorough evaluation of the potential for PM 2.5 emission reductions from an enclosed facility. The MDAQMD cannot rely on dated work, done in other air districts, especially where that work did not evaluate, as is now required by California law, the green house gas emissions associated with the power required to run an enclosed compost facility. I believe that if that analysis is conducted it will show that the net emissions (including emissions associated with power production) for an enclosed facility are vastly greater than the emissions for an open air compost facility. The contingency measure is not supported by the technical work in the Staff Report.

For this reason Nursery Products is requesting that the contingency measure be removed from the proposed 1133 rule.

Thank You!

District response to Public Comment to Governing Board 3

Contingency measures have long been used in air pollution control to anticipate potential future needs and to ensure that rules and plans adapt quickly to local conditions. In fact, USEPA has required the District to include contingency measures in its rules to handle situations where a future violation of the NAAQS may potentially occur (See District Rule 403.1(H)) triggering a variety of additional requirements. Since the contingency measure would be triggered in the event of a nonattainment finding by USEPA and that such a finding could occur at an indefinite point in the future, the contingent requirement is phrased in terms of a percentage reduction required rather than mandating a specific technology.

The District has evaluated the cost-effectiveness of the proposed rule, including the proposed rule's contingency measure, in this staff report. While greenhouse gases do not currently fall within the District's local and regional air quality mandate and authority, the District has addressed greenhouse gases in this staff report.

Public Comment Letter 4

Mojave Desert Air Quality Management District 7/9/2008

14306 Park Avenue, Victorville, CA 92392

Dear MDAQMD supervising air quality engineer Alan De Salvio,

My name is Jeffrey Quillinan and I am a resident of Barstow, California. I am very concerned about the proposed Hawes Composting Facility, slated to be built by Nursery Products LLC about eight miles west of Hinkley, CA.

If such a facility must come this close to our shared community, I would be very opposed to this composting facility if it were to actually become an open-air facility. We have really high winds in the Hinkely and Barstow area where this facility is going to be located very near to. I would only approve of this composting facility if it were an enclosed facility. That would be the only proven way to protect me and my community from horrendous levels of contaminated dust in our air and water.

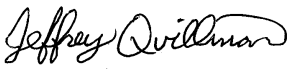
I am very concerned about any level of contamination to our air and water sources. As such, I am asking you to please do your very best in making sure this composting facility is an enclosed facility in order to protect all of Barstow and Hinkley's air and water from unnecessary and what I consider absolutely disgusting contamination.

Please do not let them spread their feces contaminated dust to my home in Barstow. Please make sure this composting facility is enclosed at whatever cost. If this composting facility were to be an open-air facility, I would be absolutely appalled.

I urge you to please help your fellow citizens in the High Desert prevent such an atrocious disaster as an open-air composting facility from happening too close to our homes. I'm not sure how many people are aware of the magnitude of this decision, but I believe I speak for most residents of Barstow and Hinkley when I ask that you please make sure this composting facility is an enclosed facility only.

Thank you for your time and consideration.

Sincerely,



Jeffrey Quillinan
841 Linda Ln
Barstow, CA 92311
760-256-7828

District response to Public Comment Letter 4

The District appreciates the concern that the commenter has regarding a specific proposed composting project. The concerns raised fall within the scope of the land use agency with approval authority over the specific project (in the case of the proposed project referenced by the commenter, the County of San Bernardino) – not the District. Enclosing composting and co-composting facilities was evaluated for cost-effectiveness as part of the development of this rule, and was found to be not cost-effective (please refer to the revised cost-effectiveness discussion in this staff report). With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for existing operations and proposed projects within the District.

Public Comment Letter 5

July 10, 2008

MDAQMD
14306 Park Avenue, Victorville, CA 92392

Dear Supervising Air Quality Engineer Alan De Salvio,

I am a resident of Barstow and my name is Manuel Gilbert Gurule. I was the mayor of Barstow in the early 1990s and I also served on the Barstow City Council. I feel that I still have a large constituency in Barstow and I am concerned for their health and wellbeing. I also served on the Air Quality Control Board for San Bernardino County.

Recently I have come to learn that the proposed Hawes Composting Facility that is coming to Hinkely is trying to become an open-air facility.

Please do not let this happen. While I do not mind if such a composting facility comes to Hinkley, I strongly urge you to please make sure that this proposed composting facility is an enclosed composting facility.

Only by being an enclosed composting facility can we all feel safe that our air quality and water quality are of the highest possible quality and free from any human feces contamination. Please consider that Hinkley and Barstow get extremely high winds throughout the year and such high winds would certainly carry the feces contaminated dust particles throughout our homes and our entire city environment.

So please, I urge that you do everything you possibly can to prevent this unnecessary air and water contamination from happening in my Hinkley and Barstow communities. Please make sure that this composting facility is only an enclosed facility in order to protect all the residents of Hinkley and Barstow from unsafe levels of human feces contaminated dust particles.

Please put yourself in our shoes and please understand our plight in this matter. We simply do not want to be contaminated in our cherished homes and city.

Thank you for your time and consideration on this very important matter.

Sincerely,

Manuel Gilbert Gurule

Manuel Gilbert Gurule
841 Linda Ln
Barstow, CA 92311
760-256-7828

District response to Public Comment Letter 5

The District appreciates the concern that the commenter has regarding the referenced composting project. The specific concerns raised fall within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District. Requiring enclosure of composting and co-composting facilities as part of proposed Rule 1133 was evaluated for cost-effectiveness, and was found to be not cost-effective (please refer to the revised cost-effectiveness discussion in this staff report). With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project.

Public Comment Letter 6

MDAQMD July 11, 08

Alan DeSalvio:

We need better air quality. Please require the composting facility be enclosed or not allowed at all.

We both have allergies now. Enough is enough!

Thank you,

Gordon and

Rose McCain

District response to Public Comment Letter 6

The District appreciates the concern that the commenter has regarding a specific proposed composting project. The proposed Rule 1133 development process evaluated requiring enclosure of composting and co-composting facilities found such requirements to be not cost-effective (please refer to the revised cost-effectiveness discussion in this staff report). The specific request to not allow a specific project falls within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District.

Public Comment Letter 7

July 17, 08

Dear Alan De Salvio,

I live at the top of Barstow Heights-Westside. I see the dust storms come in from the west and head right thru the Mojave River Valley. I could not believe anyone who had the slightest concern for health and air quality in San Bernardino County would okay an open composting facility.

The 40-50mph winds of this spring were not unusual for this area except we had more of them than usual. What tests have been done to determine how far those pathogen bearing particles go in our 40-50 mph winds. One would hope there was some testing going on this past spring during the wind storms Lasting 4-5 days at a time.

We taxpayers pay salaries to people who are supposed to be looking out for our health and welfare but it seems they are looking for special interest money to line their pockets instead.

I'm assuming this is our broken system at work as usual.

Citizen Nancy D. Ittman

Nancy D. Ittman
27315 Highview Ave
Barstow, CA 92311

District response to Public Comment Letter 7

Commenter expresses concerns regarding high wind events and fugitive dust. Proposed Rule 1133 is not intended principally as a fugitive dust control measure. However, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project. The District appreciates the concern that the commenter has regarding a proposed composting project. The specific concerns raised fall within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District.

Public Comment Letter 8

JULY 23, 2008

MARK ORR
POBox 87
(36714 Hidden River Rd)
Hinkley, CA 92347
760-253-5304

ATTN : All members of the Mojave Desert Air Quality Management District.

RE: RULE 1133 Composting and related operations, and plans of holding community workshops.

Concerning Rule 1133. Rule 1133 does not fully address the actual physical problems associated with large open-air composting operations that may be established in the Hinkley, Helendale, Newberry Springs, Barstow, Harper Lake, or even Hawes locations and surrounding region in my opinion.

Though the emissions of Volatile Organic Compounds (VOC) and ammonia from composting are limited by Rule 1133, once again the actual health threat from VOC or Particulate Matter (PM), especially toxic or contaminant substances of chemical or organic nature, can still potentially be transported by the 30-60 plus mph winds common to this region of the High Desert. Such harmful materials could be transported where physical contact, ingestion, or inhaling may occur, or where it may promote growth of harmful molds, bacteria, fungus, etc. and impact people, property, or wildlife. This is especially the case of sludge related compost materials, in my opinion.

Perhaps the MDAQMD Board fails to actually recognize the true physical nature of the problems involving seperate areas of San Bernardino County or the High Desert. At a previous

meeting of the MDAQMD reference was made of a composting site at or near Big Bear, California. The actual environmental conditions of the Big Bear serving facility cannot be compared to the common 30-60 plus mph winds and temperature extremes of the Hinkley, Barstow, or Hawes areas. I contend these areas can elevate PM or Voc levels potentially higher than at the Big Bear serving location, and can transport PM or VOC greater distances from an open-air operation.

If I lived in Big Bear, California, flooding might be a primary contaminant transporting concern on or near a mountain, but I do not live in Big Bear and my primary concern is of the actual physical environmental conditions that may transport threats to my home in Hinkley.

I want (I request) the MDAQMD members to concentrate on the actual physical environmental conditions and its ability to transport PM or VOC in the immediate region that I live, and not make comparisons to areas of obviously different environmental conditions by physical geography or climate.

The living conditions or habits of citizens in one region or area of San Bernardino, County, CA, are often very different in other regions or areas of the County. This is especially true in the case of areas where outdoor work or activity is greater, or where swamp coolers exist to draw potential contaminants inside living or working structures along with activating or re-activating moisture.

In my opinion RULE 1133 may be adequate for some areas of

San Bernardino County, but for other areas leaves an enormous opening for potential problems to occur involving climatic and temperature effects on compost operations. Alterations of RULE 1133 language or additional Rules other than 1133 would be needed to properly address the actual environmental concerns within differing regions or areas of the Mojave Desert and San Bernardino County, California.

Concerning RULE 1133 section titled Requirements and Contigency Measure 4 (6). Requiring composters of more than 100,000 wet tons of compostible material to be contained in a vented enclosure is not enough when concerning particular regions and environmental conditions. RULE 1133 still allows operations of less than 100,000 tons to transport contaminants or toxins off-site by climatic conditions, and makes no allowance for measuring accumulation of harmful materials off-site. I desire to stop harmful materials before they cause damage, not measure them until they suddenly cause damage due to a drastic climatic event, or accumulate somewhere unknown until it is too late.

RULE 1133 also appears to allow possible future abuse in my opinion, if several compost operations of less than 100,000 tons establish themselves (especially if in the same geographic area or region) and operate without concern for further emission controls. I request the weak portion of RULE 1133 be addressed by insuring such abuse of our air

quality never occurs and that full enclosure of all planned and future composting operations be required. Only by doing this can you trully address the problems of conditions of differing environmental extremes and transport of potential harmful materials. Better safe than sorry.

Citizens of the Barstow and Hinkley areas came to the MDAQMD to ask that the unique geographic and climatic conditions of our region be recognized as a serious factor upon the establishment of any large open-air composting operation. We asked that the MDAQMD scientific research properly address the potential of geography and climatic conditions transporting harmful materials off of an open-air composting site. We asked this to insure our health, safety, and quality of life.

Recently the MDAQMD advised that we attend community workshops so that we might understand MDAQMD procedures or problem solving. This, in my opinion, would primarily concern staff operations and implementation of MDAQMD or State rules. In view of our original purpose for coming before the MDAQMD the concept of workshops serves little purpose, in my opinion. Our original purpose for coming before the MDAQMD was to communicate with the Board, the rule making boady, and ask them to protect us by requiring enclosure of an open-air composting site and plan in an area of environmental extremes that could transport harmful materials from the site.

JULY 23, 2008 MARK ORR/RULE 1133/Workshops

We came before the MDAQMD, hoping it would use its rule making powers, because this is what the State Air Board (CARB) and the EPA both advised us to do. If RULE 1133 can be created then better, stronger, rules can be created that trully protect the citizens of the High Desert.
Do not adopt Rule 1133.
mo

MARK ORR
HINKLEY, CALIF.

(5)

If actual effects from climatic and geographic conditions/extremes are ignored due to cost effectiveness, then a compost operation in an area of high winds and temperatures, such as at Hawes, should not be allowed to build or operate if enclosure and trapping of PM/gases are not considered cost effective. Please respect citizens Health and quality of life.

Mark Orr
8-18-2008 8-21-2008

District response to Public Comment Letter 8

The District appreciates the concern that the commenter has regarding a specific proposed composting project. The proposed rule was developed with the climate and conditions of the High Desert in mind – not the Big Bear/Lake Arrowhead area, which is under the jurisdiction of the South Coast Air Quality Management District. With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project. The contingent enclosure portion of the proposed rule is based on the control measures the District was directed to evaluate pursuant to H&S Code §39614(d) and the CARB list of potential local control measures. Those control measures identified on the CARB list contained a 100,000 wet ton applicability threshold.

Public Comment Letter 9

CALIFORNIA BIO-MASS, INC.
A RECYCLING AND ORGANICS COMPANY
THERMAL
VICTORVILLE

July 25, 2008

Mr. Alan De Salvio
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392-2310

RE: Preliminary Comments MDAQMD Rule 1133, Composting and Related Operations

Dar Mr. De Salvio:

California Bio-Mass (CBM) supports the efforts of the Mojave Desert Air Quality Management District (MDAQMD) to improve the air quality in the High Desert. We appreciate the opportunity to offer these preliminary comments on the Draft of MDAQMD Rule 1133 – Composting and Related Operations.

Since April 2000, CBM has operated a composting facility at a site owned by the Victor Valley Wastewater Reclamation Authority (VVWRA). The site is located on Shay Road, approximately 5 miles north of the City of Victorville. The facility accepts green waste, wood waste, wallboard, paper, food material, liquid wastes, and C&D material. The facility uses a combination of windrow and static pile processing, though some material (green waste used for ADC, Co-Generation) is shipped off prior to composting. The majority of the compost produced is used in local projects.

The CBM facility accepts feedstocks from a variety of generators in the High Desert and is a critical part of the existing recycling infrastructure. Composting is a key part of many community's attempts to comply with AB 939 and related waste diversion laws. In addition, CBM plays a crucial role in recycling valuable nutrients back into the agriculture of the High Desert.

CBM's primary concern is that proposed Rule 1133 should not treat all compost feedstocks as if they were the same, as they are not. Similar regulatory development and emissions testing in other air districts (specifically the SCAQMD and the SJVUAPCD)

THERMAL 83-109 AVENUE 62, THERMAL, CALIFORNIA 92274 (760) 399-4128
VICTORVILLE 20055 SHAY RD., VICTORVILLE, CALIFORNIA 92394 (760) 246-7946

has shown that there are significant differences in emissions from different compost feedstocks. Both the SCAQMD and the SJVUAPCD have developed separate and distinct rules for composting facilities which use biosolids and/or manure, from those handling just green material. Both the SCAQMD and the SJVUAPCD have existing rules (1133 and 4566 respectively) that regulate the ammonia emissions from biosolids and/or manure composting. Much of the language in MDAQMD's rule cites either SCAQMD 1133 and/or SJVUAPCD's 4565. These rules were developed specifically for biosolids and manure composting and were not developed to address green material composting.

We strongly suggest the MDAQMD consider whether or not there is sufficient basis for the MDAQMD to regulate the emissions from green material composting. At the very least the MDAQMD should learn from its sister agencies and develop separate feedstock-specific rules for specific feedstocks.

We look forward to discussing our preliminary comments with you at the forthcoming public workshop. We have specific comments on the Best Management Practices approach in the Rule, but since it is unclear whether these BMPS were meant to address the emissions of ammonia (expected from biosolids and/or manure, but not green material) or VOCs, we will withhold those comments until this point can be clarified.

Please contact me at 909-208-0774 if I can provide any additional information.

Sincerely,

Michael J. Hardy

Michael J. Hardy
Vice President
California *Bio-Mass*, Inc

Cc: Eric Herbert, American Organics

THERMAL 83-109 Avenue 62, Thermal, California 92274 (760) 399-4128
Victorville 20055 Shay Rd., Victorville, California 92394 (760) 246-7946

District response to Public Comment Letter 9

The District agrees that composting operations vary widely depending upon component feedstocks. The proposed Rule has narrowed the applicability of the Best Management Practices section to apply to co-composting operations only.

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Public Comment Letter 10

Helendale Community Services District

26719 Vista Road, Ste. 3
P.O. Box 2608
Helendale, California 92342
(760) 951-0006 Fax (760) 951-0046

July 28, 2008

Mr. Robert Leone, Chair
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, Ca 92392-2310

Dear Chairman Leone:

Let me begin by stating that we are supportive of the concept of composting. The Helendale CSD has a sewer plant from which the sewer sludge is composted for land application. We have recently been apprised of a proposed open-air composting facility located approximately five miles north of our northerly boundary. It is our understanding that MDAQMD is working on developing Rule 1133 - a rule pertaining to "composting and related operations." We are interested in this project due to its proximity to our community; the excessive winds in the high desert; and the number of projected truck trips generated by the project.

We feel that the voice of the Helendale Community has not been heard regarding this project. The Helendale CSD was not formed until November 2006, and the approval process for this project was well underway by that time. In conversations with the Silver Lakes Association General Manager, the Association has likewise not received any information regarding the project. We would appreciate any education your staff can provide regarding the development of Rule 1133 and the approval process relevant to this project.

Upon reviewing MDAQMD's proposed Rule 1133 and South Coast AQMD's Rule 1133 there is a noticeable difference in the content. We feel any best management practices (BMP's) and best available technologies (BAT's) that are appropriate in the Valley should also be implemented in the desert. It would seem appropriate and reasonable to require this facility to be enclosed like similar facilities in Redlands and Rancho Cucamonga.

We are concerned that the desert area, with its fragile eco-system and vast open spaces, will become the low-cost location of choice for compostable materials and sewer sludge from LA, Riverside and Orange counties. We feel that every community has a responsibility to dispose of this waste in an environmentally responsible manner. We support you in your tremendous responsibility to protect the Public Trust and establish policies that will govern permissible activities in the desert communities in perpetuity, therefore, we urge you to require that this facility be enclosed.

Sincerely,

Craig Schneider
President

CC: MDAQMD Board Members
Brad Mitzelfelt, 1st District Supervisor
Eldon Heaston, Executive Director MDAQMD

District response to Public Comment 10

The District appreciates the concern that the commenter has regarding a proposed composting project. The specific concerns raised fall within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District. Differences between the proposed rule and the similar rule in the SCAQMD are based on the relative cost-effectiveness thresholds between the District and the SCAQMD (SCAQMD rule development cost-effectiveness thresholds tend to be the highest in the United States). In addition, SCAQMD has a worse nonattainment designation for a wide variety of pollutants than the current District Designations which also impacts not only the cost-effectiveness threshold but also the level of control which can be imposed upon existing stationary sources of pollution. With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project.

Public Comment Letter 11

BARSTOW heights
COMMUNITY SERVICES DISTRICT * Barstow, California
P.O. Box 1290 - Barstow, California 92312-1290 - Phone 252-2262

July 28, 2008

Alan De Salvio
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392

Dear Mr. Salvio,

The Barstow Heights Community Services District Board of Directors is concerned about the proposed Hawes Composting Facility, slated to be built by Nursery Products LLC in Hinkley, California. We understand that your agency is receiving public comment on preliminary draft rules that would govern this composting facility.

High winds are very common and they are usually west to east which makes our Barstow community downwind of this facility. We are concerned about the possible airborne pollutants, particulates, and odor that this proposed open facility will generate. The threat to the air quality in Hinkley and Barstow is at stake.

If this composting facility is approved at all, we would want the regulatory agencies to require a state-of-the-art enclosed facility. The company's experience in Adelanto makes us very concerned about their proposed operation in Hinkley.

Please consider our concerns about this project in your deliberations.

Sincerely,

Richard P. Jacobs
President of the Board
Barstow Heights CSD

Debbie Garvin
General Manager
Barstow Heights CSD

District response to Public Comment Letter 11

The District appreciates the concern that the commenter has expressed, however, specific concerns raised fall within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District. Enclosing composting and co-composting facilities was evaluated for cost-effectiveness as part of the development of this rule, and was found to be not cost-effective (please refer to the revised cost-effectiveness discussion in this staff report). With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project.

Public Comment Letter 12

SILVER LAKES ASSOCIATION
P.O. BOX 179 HELENDALE, CA 92342 (760) 245-1606

July 28, 2008

Mr. Robert Leone, Chair
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392-2310

Dear Chairman Leone:

Let me begin by stating that we are supportive of the concept of composting. Our local municipal district, the Helendale CSD has a sewer plant from which the sewer sludge is composted for land application. We have recently been apprised of a proposed open-air composting facility located approximately ten (10) miles north of our northerly boundary. It is our understanding that MDAQMD is working on developing Rule 1133 – a rule pertaining to "Composting and related operations." We are interested in this project due to its proximity to our community; the excessive winds in the high desert; and the number of projected truck trips generated by the project.

We feel that the voice of the Silver Lakes Association members has not been heard regarding this project. The Silver Lakes Association consists of approximately 8000 members and we are very concerned of our high winds and the air quality of our community. In conversations with the Helendale CSD General Manager, the CSD has likewise not received any information regarding the project. We would appreciate any education your staff can provide regarding the development of Rule 1133 and the approval process relevant to this project.

Upon reviewing MDAQMD's proposed rule 1133 and South Coast AQMD's Rule 1133 there is a noticeable difference in the content. We feel any best management practices (BMP's) and best available technologies (BAT's) that are appropriate in the Valley should also be implemented in the desert. It would seem appropriate and reasonable to require this facility to be enclosed like similar facilities in Redlands and Rancho Cucamonga.

We are concerned that the desert area, with its fragile eco-system and vast open spaces, will become the low-cost location of choice for compostable materials and sewer sludge from LA, Riverside and Orange counties. We feel that every community has a responsibility to dispose of this waste in an environmentally responsible manner. We support you in your tremendous responsibility to protect the Public Trust and establish policies that will govern permissible activities in the desert communities in perpetuity, therefore, we urge you to require that this facility be enclosed.

Sincerely,

Rob Malouf
President Board of Directors

cc: MDAQMD Board Members
Brad Mitzelfelt, 1st District Supervisor
Eldon Heaston, Executive Director MDAQMD

District response to Public Comment Letter 12

The commenter raises concerns regarding a specific proposed composting project. These concerns fall within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District. Differences between the proposed rule and the similar rule in the SCAQMD are based on the difference between cost-effectiveness thresholds for the District and SCAQMD (SCAQMD rule development cost-effectiveness thresholds tend to be the highest in the United States). With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project.

Public Comment Letter 13

July 28, 2008

Mr. Robert Leone, Chair
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392-2310

Dear Chairman Leone:

Let me begin by stating that we are supportive of the concept of composting. Our local municipal district, the Helendale CSD has a sewer plant from which the sewer sludge is composted for land application. We have recently been apprised of a proposed open-air composting facility located approximately ten (10) miles north of our northerly boundary. It is our understanding that MDAQMD is working on developing Rule 1133 – a rule pertaining to "Composting and related operations." We are interested in this project due to its proximity to our community; the excessive winds in the high desert; and the number of projected truck trips generated by the project.

As a member of the Silver Lakes Association members my voice has not been heard regarding this project. As a member of Silver Lakes Association I am very concerned of our high winds and the air quality of our community. In conversations with the Helendale CSD General Manager, the CSD has likewise not received any information regarding the project. We would appreciate any education your staff can provide regarding the development of Rule 1133 and the approval process relevant to this project.

Upon reviewing MDAQMD's proposed rule 1133 and South Coast AQMD's Rule 1133 there is a noticeable difference in the content. We feel any best management practices (BMP's) and best available technologies (BAT's) that are appropriate in the Valley should also be implemented in the desert. It would seem appropriate and reasonable to require this facility to be enclosed like similar facilities in Redlands and Rancho Cucamonga.

We are concerned that the desert area, with its fragile eco-system and vast open spaces, will become the low-cost location of choice for compostable materials and sewer sludge from LA, Riverside and Orange counties. We feel that every community has a responsibility to dispose of this waste in an environmentally responsible manner. We support you in your tremendous responsibility to protect the Public Trust and establish policies that will govern permissible activities in the desert communities in perpetuity, therefore, we urge you to require that this facility be enclosed.

Sincerely,

Phyllis & Robert Kellerman

Property Owner

cc: MDAQMD Board Members
Brad Mitzelfelt, 1st District Supervisor
Eldon Heaston, Executive Director MDAQMD

District response to Public Comment Letter 13

The District appreciates the concern expressed, however the specific concerns raised fall within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District. Differences between the proposed rule and the similar rule in the SCAQMD are based on the relative cost-effectiveness thresholds between the District and the SCAQMD (SCAQMD rule development cost-effectiveness thresholds tend to be the highest in the United States). With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project.

Public Comment Letter 14

July 28, 2008

Mr. Robert Leone, Chair
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392-2310

Dear Chairman Leone:

Let me begin by stating that we are supportive of the concept of composting. Our local municipal district, the Helendale CSD has a sewer plant from which the sewer sludge is composted for land application. We have recently been apprised of a proposed open-air composting facility located approximately ten (10) miles north of our northerly boundary. It is our understanding that MDAQMD is working on developing Rule 1133 – a rule pertaining to "Composting and related operations." We are interested in this project due to its proximity to our community; the excessive winds in the high desert; and the number of projected truck trips generated by the project.

As a member of the Silver Lakes Association members my voice has not been heard regarding this project. As a member of Silver Lakes Association I am very concerned of our high winds and the air quality of our community. In conversations with the Helendale CSD General Manager, the CSD has likewise not received any information regarding the project. We would appreciate any education your staff can provide regarding the development of Rule 1133 and the approval process relevant to this project.

Upon reviewing MDAQMD's proposed rule 1133 and South Coast AQMD's Rule 1133 there is a noticeable difference in the content. We feel any best management practices (BMP's) and best available technologies (BAT's) that are appropriate in the Valley should also be implemented in the desert. It would seem appropriate and reasonable to require this facility to be enclosed like similar facilities in Redlands and Rancho Cucamonga.

We are concerned that the desert area, with its fragile eco-system and vast open spaces, will become the low-cost location of choice for compostable materials and sewer sludge from LA, Riverside and Orange counties. We feel that every community has a responsibility to dispose of this waste in an environmentally responsible manner. We support you in your tremendous responsibility to protect the Public Trust and establish policies that will govern permissible activities in the desert communities in perpetuity, therefore, we urge you to require that this facility be enclosed.

Sincerely,

William A + Sandra J Nunn

Property Owner of Silver Lakes

cc: MDAQMD Board Members
Brad Mitzelfelt, 1st District Supervisor
Eldon Heaston, Executive Director MDAQMD

District response to Public Comment Letter 14

The District appreciates the concern that the commenter has regarding a proposed composting project. The specific concerns raised fall within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District. Differences between the proposed rule and the similar rule in the SCAQMD are based on the relative cost-effectiveness thresholds between the District and the SCAQMD (SCAQMD rule development cost-effectiveness thresholds tend to be the highest in the United States). With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project.

Public Comment Letter 15

August 4th, 2008

Edward Riddle and
Miriam Shulman
P. O. Box 111
Hinkley, CA 92347-0111

Attn: Tracy Walters
Attn: Alan De Salvio
Supervising Air Quality Engineer
MDAQMD
14306 Park Avenue
Victorville, California 92392-2310

Comments, Preliminary Draft,
MDAQMD Rule 1133.

To Whom It May Concern:

(1) Although the Draft text may conform with the format and content dictated by the rule of law, it does not conform with the *intent* of those laws, i.e., that the public be informed as to what is clearly meant in it.

The Draft is not sufficiently descriptive enough to clearly inform the public so that we would understand what all the detailed language and references actually mean, in plain language. To the average person it is not clear, and explanation over the phone is also not sufficient enough to inform the general public, even if they have read the notice, asked for a copy of it, or responded. (We only found out about the notice, then the available Draft document, by sheer luck. All of the many residents we talked to knew nothing about it.) A clear explanation of the Draft text would only add 1-3 pages to its length and fulfill that intent of the law. The MDAQMD has not.

(2) Although the MDAQMD's media public notices and frequency of those notices may have adhered to the rule of law, it did not conform with the *intent* of those laws, which is to *effectively* inform as many people as possible and in as wide a public domain as possible within its jurisdictional area. It is also the intent for as many people to comment on it as possible.

Hinkley has approximately 2,158 residents, about 512 households, as well as many other land-only owners who live well outside the media area. The Barstow Desert Dispatch, as of July 2008, had only 123 newspaper subscribers in the Hinkley 92347 zip code. This translates to only 24% of households taking the newspaper, and certainly much less who actually *read* the MDAQMD's published notices. I.e., it is mathematically likely that only 5% or less of residents even knew of the notices at all, and this can be confirmed in further commentary.

After becoming aware of the first notice we contacted Tracy, who stated that about 12-15 residents in Hinkley had asked for a copy of the Draft. Our poll elicited that roughly half of those residents had not seen the notice in the paper and had only found out about it by sheer luck.

This means that only a maximum of *4%* of Hinkley households have seen the Draft document itself and commented on it, insufficient to fulfill the intent of law. No mass mailing and/or a mass local meeting in weather for a decent turnout and in plain English. The MDAQMD has not.

(3) The wind modeling for direction and velocity as pertain to Hinkley (especially since February 2007) are unrealistic and therefore are irrelevant. They are models derived from stations and measurements not taken in Hinkley & none of them represent actual weather conditions here.

For instance: 6-4-08 winds from just south of west reached 60-65 mph in *sustained* gusts over a 12 hour period. For 18 hours both before and after that period the ~~winds heavy~~ HEAVIEST sand grains were transported at 50 mph over 12 miles through the community and beyond to Newberry Springs. *None* of these sands were from the Mojave River bed. This was not an isolated windstorm, but one which is included in at least 15 similar extraordinary wind cycle events since 2/07.

None of the weather conditions established by the MDAQMD for Hinkley are accurate, because they are done at a desk using data which are not derived from weather actually experienced at this community.

(4) Global climate changes have, since February of 2007, dictated regional and in turn very specific, consistent, and persistent local weather pattern changes in Hinkley. Winds cycles come from directions and velocities which 40-50 year residents have never seen before.

Those global, regional, and especially local climate changes have not been addressed nor have they been integrated into any of the MDAQMD's evaluations for its jurisdictional area.

(5) Regarding Rule 1133's relevance to Hinkley is not clear. Only an insane human being, company, or agency would intentionally subject Hinkley residents and others to the toxic elements contained in what Nursery Products LLC proposes to process. Since the LLC's employees are not insane, and neither are there any insane employees at the MDAQMD, the answer to the motivation for the proposal to subject Hinkley residents and their children to such material (which neither the MDAQMD or LLC employees would tolerate exposing their families to) therefore must lie elsewhere.

(6) Finally, we have determined that it is relevant, vis a vis our comments, to cite that the CARB has had several hundred applications relatively recently for permits for similar compost facilities and operations in San Bernardino County and throughout California.

It has not denied a single one of them.

Not even a Las Vegas bookie can offer such odds in favor of winning.

In California, applying to an Air Board to process what looks like safe material on paper, using weather modeling which ignores actual conditions, is a sure bet.

Under such conditions as exist, the lives of human beings and a communities' existence must, in the course of necessity, be secondary concerns.

Edward Riddle

Miriam Shulman

District response to Public Comment Letter 15

1. The rule is as clear as possible given the nature of the subject matter involved. Definitions that are standardized to the industry subject to the rule have been provided in the body of the rule itself for ease of use.

2. The rule development process for the proposed rule has complied with all applicable laws and regulations for the process.

3. The proposed rule was developed with the climate and conditions of the high desert in mind. Many of the specific concerns raised by the commenter regarding a specific project fall within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District. With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project.

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Public Comment Letter 16

CENTER ON RACE, POVERTY & THE ENVIRONMENT

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DANIELA SIMUNOVIC
COMMUNITY ORGANIZER

August 6, 2008

Michele Baird
Clerk of the Board
Mojave Desert Air Quality Management District
14306 Park Ave.
Victorville, CA 92392

Re: Comments on MDAQMD Rule 1133, Composting and Related Operations Preliminary Draft

Dear Mojave Desert Air Quality Management District Members,

I write on behalf of HelpHinkley.org and the Center on Race, Poverty & the Environment ("CRPE") to submit comments on the Mojave Desert Air Quality Management District's ("MDAQMD" or "District") Rule 1133: Composting and Related Operations Preliminary Draft ("Proposed Rule"). HelpHinkley.org and CRPE object to the Proposed Rule as written on legal, policy and technical grounds. The comments are separated into four sections. In the first section, the comments focus on the Proposed Rule's violations of the Clean Air Act and local district rules on New Source Review. The second section describes how the Proposed Rule is based upon a legally and technically inadequate feasibility study and cost effectiveness threshold which was adopted in violation of the Health & Safety Code. The third section explains the Proposed Rule's widespread policy implications, which are damaging to all residents within the Mojave Desert Air District. In the final section, HelpHinkley.org and CRPE suggest line-by-line

edits of the Proposed Rule. HelpHinkley.org and CRPE respectfully request that the MDAQMD substantially revise the Proposed Rule so that these deficiencies are remedied. Additionally, we request that the District formulate a composting rule that requires facility enclosure, similar to composting rules recently promulgated by the South Coast and San Joaquin Valley Air Districts.

I. The Proposed Rule Does Not Conform to the Clean Air Act or Local Rules.

1

The Proposed Rule does not require any technology-based emissions controls for composting facilities, regardless of size, and therefore does not conform to requirements in the Clean Air Act ("CAA") or the District's own rules. The CAA New Source Review ("NSR") requires that facilities in the Mojave Air District emitting greater than 25 tons of Volatile Organic Compounds ("VOCs") per year implement Best Available Control Technology ("BACT") in order to receive Air District approval.[1] However, the Proposed Rule fails to incorporate BACT standards and requires only the less stringent Best Management Practices ("BMP"). The Proposed Rule's failure to incorporate BACT standards renders the Rule legally inadequate. As written, the Proposed Rule will have no practical force, will create a confusing regulatory scheme, and will subject composting operators to substantial risk of liability.

A. Composting Facilities Are Major Stationary Sources.

The Proposed Rule and its supporting documents explain the District's belief that composting facilities in the Mojave Air District are not subject to NSR or BACT requirements because of its view that open-air composting facilities do not meet the minimum threshold emissions level to be classified as Major Stationary Sources. A cursory review of the Clean Air Act regulations, as well as local District rules, demonstrates that the District's beliefs are clearly unfounded.

Mojave Desert Local District Rules specify that any facility emitting more than 25 tons of VOCs per year is considered a Major Stationary Source.[2] The District acknowledges that composting facilities routinely emit well over 25 tons of VOCs per year. For comparison, Nursery Products, LLC Hawes Composting Facility is proposing to emit 357.7 tons of VOC per year, 14 times the Major Source threshold.

The District has chosen not to include emissions from the compost piles themselves in determining wether or not it will consider operations as Major Sources. In so doing, the District relies on MDAQMD Local Rule 1301(DD)(2) which states that "the Fugitive Emissions of a

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[1] MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT, RULE 1303(A)(1)-(3) (2001), *available at* <http://www.arb.ca.gov/DRDB/MOJ/CURHTML/R1303.PDF>. Because these requirements are part of the federally approved State Implementation Plan for the District, the CAA requires compliance with its NSR BACT requirements. 42 U.S.C. §§ 7502(c)(5), 7503(a) (2008).

[2] MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT, RULE 1301(DD) (2001), *available at* <http://www.arb.ca.gov/DRDB/MOJ/CURHTML/R1301.PDF>; RULE 1303(B)(1).

2

Facility shall not be included in the determination of whether a Facility is a Major Facility..." The primary question, then, is whether compost emissions are considered fugitive.

The Clean Air Act makes it clear that composting emissions are not fugitive because they are capable of being vented and, therefore, the District is obligated to include the emissions in its New Source Review calculation. Title 40 of the Code of Federal Regulations, Section 51.165(a)(1)(C)(ix), defines fugitive emissions as "those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening."[3] The issue, then, is not whether the emissions are actually vented but, instead, whether they are *capable* of being vented.

Composting emissions are routinely captured and passed through various venting systems. Both the South Coast Air Quality Control District and the San Joaquin Valley Unified Air Pollution Control District have regulations which mandate the capture and venting of composting emissions.[4] The Proposed Rule's supporting document acknowledges that completely enclosed composting facilities are common in the United States.[5] Such enclosed facilities capture and vent emissions. Emissions from composting facilities *can* reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Therefore, composting emissions are non-fugitive as defined by the CAA, and all but the smallest compost facilities will meet the definition of a Major Stationary Source.

B. BACT for Composting Operations Is Facility Enclosure.

The CAA and local rules dictate that new stationary sources in non-attainment areas must install BACT in order to receive a permit from the local air district.[6] According to MDAQMD Rule 1301(K)(3), "under no circumstances shall BACT be determined to be less stringent than the emission limitation or control technique contained in any State Implementation Plan as approved by USEPA."

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[3]Similarly, MDAQMD Rule 1301 (AA) defines fugitive emissions as "those emissions which could not reasonably pass through a stack, chimney, or vent."

[4]SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1133.2 (Jan. 2003), *available at* <http://www.arb.ca.gov/DRDB/SC/CURHTML/R1133-2.pdf>; SAN JOAQUIN VALLEY AIR QUALITY MANAGEMENT DISTRICT RULE 4565 (Mar. 2007), *available at* <http://www.valleyair.org/rules/currntrules/r4565.pdf>.

[5]MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT FEASIBILITY ANALYSIS - COMPOSTING AND RELATED OPERATIONS 5-6 (2007). The Report does not go into this in detail, but it acknowledges that in-vessel systems are common.

[6]40 C.F.R. 51.166, CFR sections are available at the Code of Federal Regulations website, <http://www.gpoaccess.gov/CFR/retrievev.html>; MDAQMD RULE 1303(a).

On August 20, 2004 EPA approved South Coast Air Quality Management District's Rule 1133 EPA as part of its State Implementation Plan.[7] Therefore, MDAQMD must accept technological requirements contained in SCAQMD's Rule 1133 as BACT for composting operations. These requirements include: 1) all active co-composting must be conducted within an enclosure; 2) all curing operations must be conducted using an aeration system under negative pressure; and 3) all exhaust from the enclosure and aeration system must be vented to an emissions control system.[8] Therefore, any facility emitting greater than 25 tons of VOC must implement controls as stringent as South Coast Air District's.

3

For this particular rule to comply with Clean Air Act requirements, it must conform to BACT requirements. It makes little sense to have a District rule that, if followed, would result in a violation of the CAA and subject the operator to lawsuit and substantial liability. HelpHinkley.org and CRPE urge the District to substantially revise the Proposed Rule and its supporting documents to require enclosure of all co-composting facilities in the Mojave Desert Air District.

II. The District's Cost Effectiveness Threshold is Invalid and Therefore Can Not Support Rule 1133.

The Mojave Desert Air Quality Management District recently accepted and filed a report that introduced a new cost-effectiveness threshold for particulate matter pollution controls. The report relied on the threshold to determine that pollution control measures for composting facilities are cost prohibitive, and hence, infeasible. The District will use this new threshold to determine the feasibility of all future control measures to reduce particulate matter pollution.

A. The District Is Not Authorized to Rely Upon This New Cost Effectiveness Threshold in Proposed Rule 1133.

In the Feasibility Analysis, a supporting document for Rule 1133, the Mojave Air District institutes a new cost effectiveness threshold for all future particulate control feasibility analyses. The setting of the new threshold is not based on ***any*** evidence in the record, and, therefore, is arbitrary and capricious and an abuse of discretion. Moreover, the District failed to submit the threshold to the Air Resources Board as required under Health and Safety Code 40725.[9] Section 40725 requires a district board to hold a public hearing before adopting any rule or regulation,

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[7] 40 C.F.R. § 52 (2004).

[8] SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1133.2(d)(1)(A)-(d)(1)C) (2003), available at http://www.aqmd.gov/rules/reg/reg11/r1133-2.pdf.

[9] CAL. HEALTH & SAFETY CODE § 40725 (2008); *See* CALIFORNIA OFFICE OF ADMINISTRATIVE LAW, 2008 OAL DETERMINATION NO. 3(S) (2008), *available at* http://www.oal.ca.gov/pdfs/determinations/2008/2008_OAL_Determination_3.pdf ("rules and regulations adopted by AQMDs must comply with the requirements established in Health and Safety Code sections 40725. These rules and regulations must be submitted to the Air Resources Board which is responsible for final approval.").

and to publish notice of that hearing at least 30 days beforehand.[10] Because the setting of a new cost-effectiveness threshold is a "regulation" as defined by the Administrative Procedure Act, and because MDAQMD never submitted the regulation to the Air Resources Board as required by Health and Safety Code 40725, the District may not rely on the threshold in Proposed Rule 1133.

The Feasibility Analysis determined that add-on control technology for composting and related operations will cost a minimum of $4,912 per ton of particulate precursor reduced. The Analysis then reports that the District will be using a new cost-effectiveness threshold for all future feasibility analyses. MDAQMD set the new threshold at $4,912 - the exact amount that would preclude the need for a technology-based composting rule. The artificial setting of a cost-effectiveness threshold, which is obviously based upon a particular desired outcome, demonstrates the District staff's bias in favor of lenient standards for industry and a particular bias in favor of a single corporate entity - Nursery Products, LLC. CRPE and Helphinkley.org urge the District to take strong action to dispel this appearance of bias. Failure to do so will erode public confidence in the Mojave Air District's ability and desire to protect public health.

5

B. California Air Resources Board Rejects Cost-Effectiveness Thresholds at or Below $5,000 for VOCs.

If the District moves forward to establish a different cost-effectiveness threshold, the threshold should meet California Air Resources Board's (CARB) standards. In a recent audit of San Joaquin Valley Air Pollution Control District, CARB criticized the district's low cost-effectiveness threshold and prompted the district to take immediate action to raise the threshold to be more in line with other air districts across California.[11] SJVAPCD had a cost-effectiveness threshold of just $5,000 per ton of VOC reduced.[12] CARB pointed to the Bay Area's threshold of $17,500, Ventura's at $18,000, San Diego's at $10,200 and South Coast's at $19,400 as being more appropriate to promote the use of state of the art control technologies.[13]

6

MDAQMD's adoption of a $4,912 cost effectiveness threshold is below even the $5,000 amount already rejected by CARB as being insufficient and out-of-line with other air districts. The District should adopt a cost effectiveness threshold that is substantially higher than the one used in the Feasibility Analysis. In doing so, each control technology identified in the report should be able to meet the District's cost-effectiveness goals.

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[10] § 40725.

[11] CALIFORNIA AIR RESOURCES BOARD STATIONARY SOURCE DIVISION, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT REVIEW REPORT OF FINDINGS AND RECOMMENDATIONS 22-24, (2005), *available at* <http://www.arb.ca.gov/audits/sjv/sjvaudit05.pdf>.

[12] *Id.*

[13] *Id.*

C. The MDAQMD is Relying on Inaccurate Emissions Factors for Composting

In its Feasibility Analysis, MDAQMD admits, "the District is using control cost numbers of questionable accuracy from a variety of inconsistent sources."[14] Nonetheless, MDAQMD relies on this report in determining feasibility and in measuring emissions. The San Joaquin Valley Air Pollution Control District compiled an *Air Emissions Data Review* for Composting, which included a section entitled *Most Relevant Biosolids Compost Data.* The section reviewed four biosolids data sets including one which measured baseline or uncontrolled emissions. This calculation used an approved VOC test method (SCAQMD 25.1/25.3) that "provides meaningful regulatory data." The *Air Emissions Data Review* assessed uncontrolled emissions from a biosolid windrow system as 3.7 pounds/ton of VOCs and 4.6 pounds/ton of NH_3, compared to 3.12 pounds/ton of VOCs and 2.81 pounds/ton of NH_3 in the MDAQMD report.[15] The Air District should revise its emissions factor given this new data, since studies now show that biosolid composting operations emit more pollution than previously thought.

7

MDAQMD's Feasibility Analysis also does not account for wind is assessing VOC emissions from composting operations. A study of a proposed South Coast composting facility revealed that wind dramatically increased VOC and ammonia emission factors, "five times higher" than expected.[16] The study analyzed wind speeds of 13-14 MPH, around only slightly higher than the Mojave Desert's average wind speed and equivalent to the Desert's average wind speed during May-July.[17] Another study analyzing VOC emissions from large farms found that increases in wind speed produced linear increases in VOC emissions.[18] Given the high wind speeds in the Mojave Air District, the VOC emission factor established in the feasibility analysis underestimates the true impact compost facilities have on local air quality. Additionally, this principle demonstrates why the Mojave Air District would benefit from control technologies as compared with areas registering lower overall wind speeds.

If the Mojave Air District raises the emissions factor to reflect the true conditions in the region, the District will be obligated to require additional control measures, such as enclosure, because these measures must then be categorized as cost-effective.

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[14]MDAQMD FEASIBILITY ANALYSIS 19.

[15]SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT GREENWASTE COMPOST AIR EMISSIONS DATA REVIEW 13-14 (2008); MDAQMD FEASIBILITY STUDY 7.

[16]SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT GREENWASTE COMPOST AIR EMISSIONS DATA REVIEW - TECHNICAL MEMORANDUM - APPENDIX C (2008).

[17] CALIFORNIA AVERAGE MONTHLY WIND SPEED, DAGGETT, BARSTOW-DAGGETT AP (2000), <http://ggweather.com/climate/wind.htm>.

[18]KENNETH CASEY, ET AL., EFFECT OF WIND TUNNEL AIR VELOCITY ON VOC FLUX RATES FROM CAFO MANURE AND WASTEWATER, 2008 ASABE ANNUAL INTERNATIONAL MEETING 23 (2008).

D. The District Should Not Rely on Little Hanaford Farms Study.

8

The MDAQMD relies heavily in its Feasibility Analysis and Proposed Rule on a study of Little Hanaford Farms. However, the study is not scientifically sound and should not be relied upon. In the SJVUAPCD *Air Emissions Data Review*, researchers compared all relevant and existing studies on composting operations. They analyzed 15 different studies, including Little Hanaford Farms. In analyzing the Little Hanaford Farms report, the consultant decried the study's method of studying emissions and lack of work or test data.[19] In fact, the author noted that "[t]hese findings provide no useful information. Discount this reference." The author appears incredulous about the lack of data about method and scope of work, as well as test data, concluding his remarks by exclaiming "You have to be kidding me!" [20] The MDAQMD should not base its Feasibility Analysis and Proposed Rule on unscientific studies such as Hanaford Farms.

III. Proposed Rule 1133 Is Bad Policy.

A. Proposed Rule 1133 Is Not Protective of Human Health.

Composting produces significant amounts of pollutants that harm human health and the environment. MDAQMD staff acknowledges that composting facilities emit significant levels of ammonia and VOCs.[21] A group of representatives from California agencies, non-profits and industry groups notes that manure processing also releases $PM_{2.5}$ and PM_{10}.[22]

These pollutants are extremely harmful to human health. PM_{10} (particles less than 10 micrometers in diameter) poses the greatest health concern. They can pass through the nose and throat and enter the lungs, causing irritation among the general population and more severe impacts among sensitive populations, such as the elderly, children and people with asthma.[23] Continuous exposure to ammonia is associated with adverse effects on the respiratory tract, liver, kidneys and spleen.[24] According to the EPA, VOCs are associated with eye, nose, and throat irritation; headaches, loss of coordination, nausea; and damage to the liver, kidney, and central

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[19] SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT GREENWASTE COMPOST AIR EMISSIONS DATA REVIEW - TECHNICAL MEMORANDUM - ANNOTATED BIBLIOGRAPHY FACT SHEET (2008).

[20] *Id.*

[21] MOJAVE DESERT AIR DISTRICT PRELIMINARY DRAFT RULE 1133(A)(1)(a)(i) (2008).

[22] SAN JOAQUIN VALLEY DAIRY MANURE TECHNOLOGY FEASIBILITY ASSESSMENT PANEL, AN ASSESSMENT OF TECHNOLOGIES FOR MANAGEMENT AND TREATMENT OF DAIRY MANURE IN CALIFORNIA'S SAN JOAQUIN VALLEY 10 (2005) *available at* http://www.arb.ca.gov/ag/caf/dairypnl/dmtfaprprt.pdf.

[23] U.S. ENVIRONMENTAL PROTECTION AGENCY, PM 10 FACT SHEET (2007) *available at* <http://www.epa.gov/wtc/pm10/pm_fact_sheet.html>.

[24] U.S. ENVIRONMENTAL PROTECTION AGENCY, SUMMARY REVIEW OF THE HEALTH EFFECTS ASSOCIATED WITH AMMONIA: HEALTH ISSUE ASSESSMENT (2002), *available at* <http://oaspub.epa.gov/eims/eimsapi.dispdetail?deid=44690>.

nervous system.[25] Some organics can cause cancer in animals; some are suspected or known to cause cancer in humans.[26] Key signs or symptoms associated with exposure to VOCs include irritation around the eyes, nose and throat discomfort, headache, allergic skin reaction, difficulty breathing, declines in serum cholinesterase (an essential enzyme in the heart and brain) levels, nausea, vomiting, nose bleeds, fatigue and dizziness.[27]

Reducing particulate matter air pollution is one of CARB's highest public health priorities. Recent studies indicate that the current ambient levels of PM_{10} experienced in many different communities in the United States are associated with increases in daily cardio-respiratory mortality and in total mortality.[28] Increases in ambient PM_{10} levels have also been shown to result in increases in acute respiratory hospital admissions, school absences in children, and increases in the use of medications in children and adults with asthma.[29] In fact, attainment of California's standards is expected to result in the yearly prevention of an estimated 6,500 premature deaths, approximately 400,000 incidences of lower respiratory symptoms among children ages seven to fourteen, and over two million lost work days.[30]

The entire Mojave Desert Air District has been designated non-attainment for the State PM_{10} standard.[31] In addition, the United States Environmental Protection Agency designated the San Bernardino County portion of the MDAQMD non-attainment for the Federal PM_{10} standard.[32] The southwest portion of the MDAQMD has been designated non-attainment for the State and Federal $PM_{2.5}$ standards.[33] Not requiring mitigation of PM emissions from composting facilities will exacerbate this already dangerous situation.

The Cornell Waste Management Institute published a summary of studies focusing on potential adverse effects that composting facilities have on nearby populations exposed to the previously mentioned pollutants.[34] These studies found inflammatory responses in the upper airways as a result of prolonged exposure, increased responses from susceptible members of the community,

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[25] U.S. ENVIRONMENTAL PROTECTION AGENCY, BASIC INFORMATION: ORGANIC GASES (VOLATILE ORGANIC COMPOUNDS-VOCs) (2007), *available at* <http://www.epa.gov/iaq/voc.html>.

[26] *Id.*

[27] *Id.*

[28] Cizao Ren, Gail M. Williams & Shilu Tong, *Does Particulate Matter Modify the Association Between Temperature and Cardiorespiratory Diseases?*, 114(11) ENVIRON HEALTH PERSPECT 1690 (2006), *available at* <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1665419>.

[29] Greater Boston Physicians for Social Responsibility, Health Effects of Criteria Air Pollutants from Power Plants, Health Effects: American Thoracic Society Summary (2002), *available at* <http://psr.igc.org/nrtb-power-plants4.htm>; David V. Bates, *The Effects of Air Pollution on Children*, 103(Supp. 6) ENVIRON HEALTH PERSPECT 49, 50 (1995) (studying effects of pollution on children);

[30] YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT, PROPOSED IMPLEMENTATION OF SENATE BILL 656, 6 (2005), *available at* <http://www.ysaqmd.org/downloads/SB656StaffReport.pdf>.

[31] MADQMD FEASIBILITY ANALYSIS 3, TABLE 1.

[32] CALIFORNIA AIR RESOURCES BOARD, MOJAVE DESERT AIR BASIN II-D-I (2005), *available at* <http://www.arb.ca.gov/pm/pmmeasures/pmch05/mojd05.pdf>.

[33] *Id.*

[34] ELLEN Z. HARRISON, CORNELL WASTE MANAGEMENT INSTITUTE AT CORNELL UNIVERSITY 44-50 (2007), *available at* <http://cwmi.css.cornell.edu/healthimpacts.pdf>.

nausea, excessive fatigue, and an increase in health related complaints.[35] The survey of numerous studies recommends enclosing composting facilities to mitigate these impacts.[36]

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Unfortunately, Proposed Rule 1133 does not require any control technology to reduce VOC, ammonia, and PM emissions. Despite acknowledging that composting emits VOCs and ammonia,[37] the preliminary draft of the rule does not propose specific control requirements. This would leave towns in proximity to the proposed site, like Hinkley, exposed to pollutants that injure human health.

B. The Proposed Rule Does Not Reduce Other Heath Risks Associated with Open Air Composting Such As Migration of Heavy Metals and Pathogens Off-Site.

10

Sludge compost contains heavy metals and pathogens that harm human health. The heavy winds in the Mojave Desert will amplify the impacts of these pollutants.[38] The California Regional Water Quality Control Board in the Lahontan Region noted that open air composting increases risks posed by a variety of heavy metals.[39] Data taken from the Barstow Airport indicates that the Mojave Desert area has the fourth highest average monthly wind speed in California.[40] These average wind speeds peaked for Barstow at 14.4 miles an hour in May from 1992-2000.[41] Wind speeds of this magnitude carry with them great potential to disperse heavy metals and pathogens found in sludge.

Heavy metals such as lead and mercury pose a tremendous risk to human health. Lead can cause reproductive problems in men and women, high blood pressure and hypertension, nerve disorders, memory and concentration problems, and muscle and joint pain.[42] Mercury can cause tremors; emotional changes (e.g., mood swings, irritability, nervousness, excessive shyness); insomnia; neuromuscular changes (such as weakness, muscle atrophy, twitching); headaches; disturbances in sensations; changes in nerve responses; and performance deficits on tests of

[35] *Id.*

[36] *Id.* at 48.

[37] PRELIMINARY DRAFT RULE 1133(A)(1)(a)(i).

[38] SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT GREENWASTE COMPOST AIR EMISSIONS DATA REVIEW - TECHNICAL MEMORANDUM - APPENDIX C (2008).

[39] NURSERY PRODUCTS, FINAL ENVIRONMENTAL IMPACT REPORT FOR THE NURSERY PRODUCTS COMPOSTING FACILITY, CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LAHONTAN REGION, COMMENT LETTER § 3, p. 2 (2006) ("based on data from sewage sludge drying facilities, constituents of concerns for waste planned to be treated by the proposed facility may be aluminum, antimony, barium, beryllium, boron, chromium, cobalt, copper, manganese, silver, vanadium, zinc, arsenic, cadmium, lead, mercury, nickel, selenium, thallium, cyanide, sulfide, and chloride.").

[40] CALIFORNIA AVERAGE MONTHLY WIND SPEED, DAGGETT, BARSTOW-DAGGETT AP (2000), <http://ggweather.com/climate/wind.htm>.

[41] *Id.*

[42] U.S. ENVIRONMENTAL PROTECTION AGENCY, LEAD IN PAINT, DUST, AND SOIL: BASIC INFORMATION (2007), *available at* <http://www.epa.gov/lead/pubs/leadinfo.htm#health>.

cognitive function.[43] At higher exposures there may be kidney effects, respiratory failure and death.[44]

Even more alarming is the ease with which people can ingest airborne heavy metals. People can ingest lead if they put their hands or other objects covered with lead dust in their mouths or simply breathe in lead dust.[45] It is even easier for lead to be ingested by children because babies and young children often put their hands and other objects, which may be covered with lead, in their mouths.[46] Weather, such as the Mojave Desert's high winds, and other factors can easily disperse mercury over long distances.[47]

The proposed rule fails to adequately mitigate these impacts. By requiring enclosure and treatment of emissions, MDAQMD can protect the health of the Mojave's residents from exposure to wind-borne heavy metals and pathogens.

C. The Proposed Rule Does Not Protect the Region's Water Resources from Wind-Blown Contamination that May Settle on Recharge Ponds and Surface Waterbodies

Open-air composting produces high levels of dust and debris. Wind causes these particles, in addition to affecting human health, to end up in recharge ponds and surface waterbodies. In a letter regarding the proposed Nursery Products facility near Hinkley, the California Regional Water Quality Control Board, Lahontan Region commented that "Pollutants contained in windblown dust and debris from the proposed facility could be transported away from the site and may come in contact with storm waters and affect surface or groundwater quality downwind of the project."[48]

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Requiring composters to enclose their facilities or vent and treat gases will dramatically reduce fugitive dust emissions, protecting the Mojave Air District's water resources.

D. The Proposed Rule Encourages Polluting "Open Air" Composting Operations from Other Areas to Locate in the Mojave Air District

Because surrounding Air Districts have enacted rules requiring composting facilities to reduce VOC by emissions by 80% or more, if the Mojave Air District allows open-air composting, it

[43] U.S. ENVIRONMENTAL PROTECTION AGENCY, MERCURY: HEALTH EFFECTS (2007), *available at* <http://www.epa.gov/mercury/effects.htm>.
[44] *Id.*
[45] LEAD IN PAINT, DUST, AND SOIL: BASIC INFORMATION.
[46] *Id.*
[47] U.S. ENVIRONMENTAL PROTECTION AGENCY, MERCURY: HUMAN EXPOSURE (2007) *available at* <http://www.epa.gov/mercury/exposure.htm >.
[48] NURSERY PRODUCTS, FINAL ENVIRONMENTAL IMPACT REPORT FOR THE NURSERY PRODUCTS COMPOSTING FACILITY, CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LAHONTAN REGION, COMMENT LETTER § 3, p. 5 (2006).

will become a magnet for composters who want to avoid the requirements of other air districts.[49] The Mojave Desert will end up housing a disproportionate amount of compost facilities, exacerbating the effects on the Mojave Air District's environment and its communities.

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By utilizing the same controls that other air districts, such as the San Joaquin Valley Air Pollution Control District and the South Coast Air Quality Management District, have employed, MDAQMD can ensure that the Mojave Desert does not receive a disproportionate number of compost facilities.

E. The Rule Is Not Effective at Reducing Air Emissions.

The proposed rule for the Mojave Air District attempts to achieve only 10% reductions in VOC emissions, which is dramatically less than rules from other air districts attempt to achieve. The San Joaquin Valley Air Quality Management District recently passed a law that requires 80% reductions.[50] The South Coast Air Quality Management District did likewise.[51]

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Other air districts demonstrate that it is reasonable to require 80% or higher reductions in VOCs and ammonia. There is no difference between the San Joaquin Valley or the South Coast Air Basin and the Mojave Desert that would render their measures infeasible here. Not requiring 80% reductions in this rule forgoes extensive pollution reductions for no reason.

F. The Proposed Rule's Inconsistency with Clean Air Act BACT Requirements May Lead to Significant Liability for the Mojave Desert Air District.

Under the Clean Air Act (CAA), every state must submit a State Implementation Plan (SIP) that details how that state will comply with the EPA's pollution limits.[52] For areas in nonattainment for any pollutant, SIPs must comply with emission limitation standards.[53] These requirements include standards for technological controls that are the stricter of the most technologically stringent contained in a state SIP or the most stringent industry standard.[54]

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Existing standards demonstrate that the Mojave Desert Air Board should require greater pollution reduction than the current proposed rule does to meet CAA BACT requirements. The South Coast Air Quality Management District Rule 1133-2 requires 80% VOC reduction technology on all new co-composting facilities and 70% reductions on existing facilities.[55] The San Joaquin Valley Air Pollution Control District Rule 4565 also requires composting and co-composting facilities above a threshold size to reduce VOC emissions by 80%.[56] These levels of VOC

[49] CONVERSATION WITH MICHAEL BUSS, SENIOR AIR QUALITY ENGINEER, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT.
[50] SAN JOAQUIN VALLEY AIR QUALITY MANAGEMENT DISTRICT RULE 4565 (Mar. 2007).
[51] SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1133 (Jan. 2003).
[52] Clean Air Act, 42 U.S.C. § 7410(a)(1) (2008).
[53] § 7410(a)(2)(I).
[54] Clean Air Act Part D, § 7501 *et seq.*
[55] SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, RULE 1133-3(D)(1)-(3) (Jan., 2003).
[56] SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, RULE 4565(5.3.3) (Mar. 2007).

reduction are becoming standard for the composting industry. In 2004, the U.S. Environmental Protection Agency (EPA) updated California's SIP based on the South Coast's Rule 1133 and its regulation of compost VOC and ammonia emissions.[57]

Not requiring similar pollution reduction technology leaves the Mojave Air District Board subject to liability. By failing to require 80% VOC reductions, the Mojave Air Board will fail to meet its CAA requirements for pollution reduction technology. The Mojave Air Board needs to comply with existing standards of 80% or greater reductions in order to comply with CAA.

G. The Proposed Rule Does Not Encourage Compost Operations to Adopt Innovative Technologies to Reduce Health Risks Associated with Composting Operations, Such As Those Required by Neighboring Air Districts.

The South Coast Air Quality Management District's Rule 1133 and the San Joaquin Valley Air Pollution Control District's Rule 4565, discussed above, contain an assortment of control technologies that the Mojave Air District Board should require. The rules list various technologies that composting facilities may choose from to comply with 80% reductions, including enclosure design or technology, aeration, biofiltration, scrubbing, feedstock component optimization, biosolids thermal pre-treatment, and staged active pile construction and aeration.[58] Each rule also allows composters to create new technologies or improve current ones so long as they comply with required emission limits.[59] This encourages facilities to competitively generate new, less expensive pollution controls.

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By allowing facilities to comply with the proposed rule through only Best Management Practices, the proposed Mojave Desert Air District rule fails to compel composters to develop new, more effective technologies to combat air pollution.

H. The Proposed Rule Is Unfair to Compost Operations in San Bernardino County and Surrounding Counties Who Are Currently Complying with BACT Requirements.

Not requiring similar controls for the Mojave Air District will disadvantage composters in other districts. Existing co-composting rules are already requiring composters to use systems that achieve 80% or greater VOC and ammonia reductions.[60] These districts are complying with BACT standards.

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Companies in these air districts will be at a disadvantage if they have to compete with composters who are not required to adequately mitigate their pollution. Under the proposed rule,

[57] U.S. ENVIRONMENTAL PROTECTION AGENCY, REVISIONS TO THE CALIFORNIA STATE IMPLEMENTATION PLAN, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (2004), *available at* http://www.epa.gov/EPA-AIR/2004/March/Day-22/a6212.htm.

[58] RULE 1133-2 (E)(1)(D)(I)-(XIII); RULE 4565 (5.3.3.2) tbl. 2.

[59] RULE 1133-2 (E)(1)(D)(XII)-(XIII); RULE 4565 (5.3.3.2) tbl. 2.

[60] SAN JOAQUIN VALLEY AIR QUALITY MANAGEMENT DISTRICT RULE 4565 (Mar. 2007); SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1133 (Jan. 2003).

Mojave Desert composters will bring in a disproportionate amount of compost from surrounding areas, exacerbating the pollution they will cause and undermining the effectiveness of the rules passed by other air districts.

I. The Proposed Rule Paves the Way for California's Largest Sludge Compost Operation to Locate Near Hinkley, in Prime Desert Tortoise Habitat.

The proposed rule would allow the presence of composting facilities that threaten the presence of the Desert Tortoise, symbolic of the Mojave Desert. The tortoise has already faced many threats to its existence. In 1989, information on high mortality rates and the presence of an upper respiratory tract disease in populations of the desert tortoise resulted in the Fish and Wildlife Service (FWS) temporarily listing it as endangered.[61] In 1990, scientists determined that other threats existed such as losing habitat to development, the deteriorating quality of its habitat, and ravens killing young tortoises.[62]

The proposed 80 acre site is directly within the boundaries of Category 1 Desert Tortoise critical habitat, which FWS considers most suitable for tortoise occupation.[63] Evidence abounds of the presence of desert tortoises on the site including actual live desert tortoises, scat, and burrows.[64] Thus, as noted by the California Department of Fish and Game, the project is in conflict with the Desert Tortoise Recovery Plan which says that habitat-destructive military maneuvers, clearing for agriculture, landfills, and any other surface disturbance that diminishes the capacity of the land to support desert tortoise, other wildlife, and native vegetation should be prohibited throughout Desert Wildlife Management Areas because these activities are generally incompatible with Desert Tortoise recovery.[65]

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A rule that allows composters to create an unmitigated facility on 160 acres of prime Desert Tortoise land carries with it several risks to the Desert Tortoise population both on and off-site. First, the composting facility effectively destroys known habitat. Second, human activity in the form of composting encourages the presence of ravens which are known to prey upon Desert Tortoises and have contributed greatly to the decline in Desert Tortoise populations.

By modifying the proposed rule to require enclosure, MDAQMD can ensure that any compost facilities in the Mojave Desert will have a minimal impact on desert tortoises and other wildlife. Further measures may be required to mitigate the impact of land use.

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[61] U.S. FISH AND WILDLIFE SERVICE, DESERT TORTOISE RECOVERY OFFICE: THREATS TO DESERT TORTOISES (2007) *available at* <http://www.fws.gov/nevada/desert_tortoise/dt_threats.html>.

[62] *Id.*

[63] NURSERY PRODUCTS, FINAL ENVIRONMENTAL IMPACT REPORT FOR THE NURSERY PRODUCTS COMPOSTING FACILITY, U.S. FISH AND WILDLIFE SERVICE, COMMENT LETTER § 3, p. 2 (2006).

[64] NURSERY PRODUCTS, FINAL ENVIRONMENTAL IMPACT REPORT FOR THE NURSERY PRODUCTS COMPOSTING FACILITY, CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD, COMMENT LETTER § 3, p. 6 (2006).

[65] NURSERY PRODUCTS, FINAL ENVIRONMENTAL IMPACT REPORT FOR THE NURSERY PRODUCTS COMPOSTING FACILITY, CALIFORNIA DEPARTMENT OF FISH AND GAME, COMMENT LETTER § 3, p. 2 (2006).

J. The Proposed Rule Is Not Protective of the Region's Desert Tortoise Population, Which Is Prone to Respiratory Illness from Emissions and Pathogens from Open Air Composting Operations.

There is an increased risk to Desert Tortoises of metal toxicity from air-born particulate matter that may be carried by the wind from the windows on the Project site to Desert Tortoise habitat.[66] This metal toxicity can endanger both Desert Tortoises on and off-site. As mentioned previously, the high desert winds could easily carry metals long distances affecting Desert Tortoises throughout the Mojave Desert. Desert Tortoises are even more susceptible to these airborne toxins because of their sensitive respiratory systems.[67]

18

Requiring enclosure of compost facilities will protect the Desert Tortoise from particulate matter and other emissions produced during composting.

K. The Proposed Rule Allows Polluters to Pass Off Pollution Costs to the Public, While Costing Them Virtually Nothing.

Under the proposed rule, polluting compost facilities can ignore the environmental, health and social costs of their pollution. These effects, discussed above, will create significant medical, aesthetic and environmental expenses that the polluting compost facilities will not have to pay. Instead, Mojave Air District residents will pay these costs in increased medical bills and lost work productivity because of respiratory illnesses, loss of aesthetic value in their surrounds, loss of the area's wildlife and decreased quality of life due to nuisance issues. Though some of these values are difficult to quantify, the cost of pollution controls is minimal in comparison.

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L. Requiring Enclosure or Other Pollution Filters Is Extremely Cost Efficient If Costs Are Passed onto Consumers Who Contribute to the Waste Stream.

The increased expense of reducing VOCs by 80% or more is minimal and could be passed onto consumers with no significant effect. In enacting its own rule requiring VOC reductions from composters, the San Joaquin Valley Unified Air Pollution Control District found that composters could pass the increased cost of pollution reduction onto consumers for only 35 cents per year per consumer.[68] The South Coast Air District came up with similar cost estimates. The South Coast Staff Report states "[f]or new co-composting facilities with a combined throughput of 200,000 tons per year, this cost would represent an additional $0.08 per month per household in the Basin

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[66] *Id.*

[67] U.S. GEOLOGICAL SURVEY, THREATS TO DESERT TORTOISE POPULATIONS: A CRITICAL REVIEW OF THE LITERATURE (2002), *available at* <http://www.werc.usgs.gov/sandiego/pdfs/tortoisethreats.pdf>. The report highlights several respiratory illnesses that impact Desert Tortoises.

[68] SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, FINAL DRAFT STAFF REPORT FOR REVISED PROPOSED NEW RULE 4565, APPENDIX D: SOCIOECONOMIC IMPACT ANALYSIS 19 (2007) ("For the affected source serving the Sanitation District of Los Angeles County, the $728,850 annual cost translates into a rate increase of $0.35, which could be added on top of the average annual bill of $105, for a net change of 0.3 percent.").

(or $0.004 per month per household for every 10,000 tons of throughput) assuming that the cost would be passed onto the Basin households. The compliance cost for all existing co-composting facilities would represent an additional $0.25 per month per household (under scenario 3 above) using the same assumption."[69]

This cost would be similar for composters in the Mojave Desert. The District should calculate costs per household or consumer. This will demonstrate that controlling emissions for this type of facility is one of the cheapest options available to reduce VOC and ammonia because the costs of technological controls can be shared by so many consumers.

M. The Proposed Rule Requires Enclosure Only If the Mojave Air District Becomes Nonattainment for $PM_{2.5}$, Even Though Composting Operations Emit Primarily PM_{10}, for which the District Already Is in Nonattainment.

The proposed plan's contingency measure undermines pollution protection as well as ignoring the primary pollutant from compost - PM_{10}. Section (4) of the proposed rule requires mitigation measures only if the United States Environmental Protection Agency declares the Mojave Desert Air District to be in non-attainment for $PM_{2.5}$ under the National Ambient Air Quality Standard.

This contingency ignores the pollution that co-composting releases regardless of the Air District's attainment status. Requiring mitigation only if the Air District reaches non-attainment will allow extensive pollution that is completely preventable.

21

This contingency also erroneously focuses on $PM_{2.5}$ while compost primarily emits PM_{10}.[70] PM10 is generated when composting materials are unloaded, when piles are turned or moved, from wind entrainment of static uncovered piles, and from the screening of finished compost. Associated activities like chipping and grinding also produces PM10 emissions when the wood and green waste are mechanically ground and shredded. PM10 is also generated from periodic grading, onsite equipment operations, fugitive dust from haul trucks and employee commute trips. Most of the harmful environmental effects from compost-generated PM can be significantly reduced if the District requires composting and related operations to be fully enclosed and installed with pollution control devices that capture PM precursors before they are released into the environment.

[69] SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, FINAL STAFF REPORT FOR PROPOSED RULE 1133 1-2 (2002), *available at* http://www.aqmd.gov/rules/doc/r1133/r1133_staffreport.pdf.

[70] SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, TECHNOLOGY ASSESSMENT FOR PROPOSED RULE 1133 1-2 (2002), *available at* <http://www.aqmd.gov/rules/doc/r1133/r1133_techassessment.pdf> ("Composting and related operations (i.e., chipping and grinding) are sources of direct PM_{10} and ammonia, which is a PM_{10} precursor. PM_{10} is generated when composting piles are turned, moved, and from wind entrainment of static uncovered piles. Biological degradation (or decomposition) of organic materials (i.e., yard waste, manure, sewer sludge, etc.) that occurs during composting and when chipped and ground material begins to rot produces ammonia."). The Mojave Air District technology assessment copies this passage from the South Coast document word for word, but changes "PM_{10}" to "$PM_{2.5}$".

This failure to account for compost's primary pollutant means that compost facilities will be able to pollute heavily without worrying that they will compel more stringent regulations of their processes. The Air District is also already in nonattainment for PM_{10}, so a properly written contingency plan would already apply, making this provision meaningless.

The contingency plan should be removed entirely and mitigation should be required regardless of the Air District's attainment status.

IV. Specific Revisions By Section

A. (A)(1): Purpose

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Section (A)(1)(a)(i) states that the purpose of the rule is to "limit emissions of volatile organic compounds (VOC) and ammonia from Composting and related operations." As the Proposed Rule is being promulgated under Health & Safety Code § 39614 to reduce public exposure to particulate matter, a stated purpose of the Proposed Rule should be to reduce particulate matter.

Section (A)(1)(a)(iii) appears incomplete as the sentence ends with an "and".

B. (A)(3): Exemptions

23

Section (A)(3)(a)(ii) exempts agricultural composting from the provisions of section (C)(1) on general administrative requirements. Section (a)(3)(b)(iii) exempts agricultural composting from the provisions of section (C)(2) on chipping and grinding operations requirements. However, agricultural composting should not be exempt from these requirements because, unlike the other exempt activities, agricultural composting operations emits a significant amount of PM and VOCs. Exempting this type of facility will not meet the Proposed stated purpose of "limit[ing] emissions of volatile organic compounds."

24

Section (A)(3)(b) provides certain exemptions from "sections . . . (C)(2)(d), (C)(2)(e), and (C)(2)(f)." However sections (C)(2)(d), (C)(2)(e), and (C)(2)(f) do not exist. Sections (A)(3)(c) and (C)(2)(c) also cite to these nonexistent sections.

C. (C)(1): General Administrative Requirements

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Section (C)(1)(b)(xiii) requires compost and chipping and grinding operations to report "air-quality related enforcement actions issued in writing against the Facility" to the District. However, the District should not limit the reporting of enforcement actions against composting and chipping and grinding operations. Both non air-quality and unwritten enforcement actions may have an indirect impact on air quality and therefore should be reported to the District. For example, a facility receiving an enforcement action for receiving unpermitted materials may not consider that an air-related offense, even though different materials emit different emissions at different rates. Facilities should not have discretion to decide which enforcement

action it believes are air-quality related. In addition, the facility should submit not just the number of such offenses, but a description of the offenses as well.

D. (C)(2): Chipping and Grinding Operation Requirements

Section (C)(2)(c) states that the time requirements laid out in Section (C) can be extended by the number of Rainy Days and Wet Weather Conditions. However, the Proposed Rule defines Wet Weather Conditions as "[w]eather conditions following a Rainy Day not to exceed 10 days." Section (B)(42). This definition is too open ended to support an extension of time limits that encompass the primary emission reduction method for chipping and grinding operations. As the definition for "Wet Weather Conditions" stands, the proposed rule gives no indication how long time limits can be extended. This section and the definition of "Wet Weather Conditions" need further clarification.

26

E. (C)(3): Composting and Co-Composting Operations General Process Controls (Best Management Practices) Requirements

Section (C)(3)(a)(i) states that "no Compostable Material greater than one inch (1") in height is visible in the areas scraped or swept immediately after scraping or sweeping." The District should strike "immediately after scraping or sweeping" from the Proposed Rule. By making the requirement applicable only "immediately" after sweeping or scraping, the District eviscerates any enforceability and much of the benefit of the rule. Unintentional piles of compostable material that form at any time will create unnecessary and preventable emissions. Furthermore, by applying the requirement only immediately after scraping or sweeping, the District will have a hard time enforcing the restriction unless they witness the process. It is not too much to ask that facility operators be vigilant in dismantling unintended piles of compostable material that form at any time.

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Section (C)(a)(ii) states that "[t]esting shall be done on the day the materials are mixed." However, the rule does not make clear whether or not the testing must be done prior or subsequent to the mixing of materials. The District should clarify that testing should occur after the piles have been mixed.

28

Section (C)(3)(iii) gives operators a choice of two requirements. Either the operator must maintain moisture content between 40 and 70 percent, or the operator must cover the active and curing piles within three hours of turning. The District should require both conditions. The operator should be required to maintain a optimal moisture content and cover the material within three hours. This will enhance emissions reductions. In addition, the Proposed Rule gives operators a choice of how to cover the compostable materials. The operator can either cover the compost with a waterproof covering, or 6 inches of finished compost, or 6 inches of soil. However, the District should require that compost be covered with a waterproof covering to ensure that the optimal moisture content is maintained and that emissions will have less of a chance of escaping the piles. Finished compost and soil are inadequate to perform both functions.

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F. (C)(4): Contingency Measure

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Section (C)(4)(a) states that the requirements of this section only apply if the U.S. EPA makes a finding that the District has been designated as a non-attainment area for the $PM_{2.5}$ National Ambient Air Quality Standard. This contingency should be removed so that the requirements of the section are immediately applicable. This is especially true given that compost operations, while emitting both PM_{10} and $PM_{2.5}$, primarily emits PM_{10} for which the District already is in non-attainment. See above, for a detailed explanation why the enclosure requirement must be made immediately applicable.

V. Conclusion

31

HelpHinkley.org and CRPE urge this Board to take immediate and appropriate action to comply with the CAA, local air rules and the Health & Safety Code. Specifically, the District must revise the Proposed Rule to meet BACT requirements of CAA and local NSR rules, mandating enclosure for co-composting facilities. Thank you for your consideration of these matters. Please include CRPE and HelpHinkley.org in any future notices about this rule-making or any composting permits that may come before you.

Sincerely,

Ingrid Brostrom
Staff Attorney

District response to Public Comment Letter 16

1. Best Available Control Technology (BACT) is defined and applied by the District's New Source Review (NSR) regulation, Regulation XIII, specifically Rules 1301 and 1302. Regulation XIII and its definitional and calculational methodologies are in turn based upon requirements in the Federal Clean Air Act and regulations promulgated by USEPA thereunder. Commenter appears to be confusing the State Implementation Plan (SIP) planning and program requirements for extreme ozone nonattainment areas with BACT requirements for new or modified major stationary sources as implemented by District Regulation XIII.

Proposed Rule 1133 is a source specific rule proposed in response to the requirements of H&S Code §39614. The proposed rule is unrelated to NSR either in general or for a particular specific project.

2. Emissions from piles (such as windrows) are fugitive emissions within the New Source Review program. This is true for all piles (e.g. product storage piles and raw material piles) regardless of the source category at which such piles occur. The District follows USEPA regulatory guidance regarding the characterization and inclusion of fugitive emissions in NSR analysis. Analysis of a particular specific project pursuant to Regulation XIII is dependant upon the application as submitted for a particular project and thus "major source" status under Regulation XIII is determined on a project-by-project basis pursuant to the provisions of that regulation. Commenter may be confusing NSR of a specific project with nonattainment area planning requirements necessitating the adoption into the SIP of specific rules for a variety of different source categories.

The characterization of fugitive emissions in a particular NSR analysis, however, has no bearing upon the rule making decisions of other air districts. Other air districts (namely SCAQMD and SJVAPCD) have determined that a regulation in effect requiring the enclosure of large composting facilities was feasible and cost-effective within their jurisdictional area based upon local conditions, local cost-effectiveness thresholds and local nonattainment status, and have therefore adopted source specific rules that including that requirement

3. The adoption (or Federal approval) of a source specific rule in the SCAQMD has no bearing on the planning and level of rule making required pursuant to the Federal Clean Air Act upon the MDAQMD. That is determined by the designation (attainment/nonattainment) and classification (moderate to extreme) of the District. The MDAQMD has a different set of nonattainment designation and classification from those in SCAQMD and thus has a different set and level of rules required as part of its SIP.

Commenter is once again confusing NSR requirements for specific projects with planning and rule making requirements specific to certain nonattainment classifications for ozone. The applicability of NSR imposed BACT to a particular proposed project is not related to a SIP approved rule in another air district. If pursuant to the District's Regulation XIII a BACT determination is necessary under NSR for a particular project the existence of a SIP approved rule and its level of required control in another air district may be considered in making that specific BACT determination. However, this project-by-project determination is completely

different from the requirements for of a source specific rule that is solely the result of a California Health & Safety Code requirement.

4. The Administrative Procedure Act does not apply to the District as commenter has been affirmatively informed by several agencies.

The District's rulemaking process conforms with all applicable provisions of the H&S Code including the applicable notice provisions. A cost-effectiveness of the proposed rule is presented in this staff report as required by State law.

5. The cost-effectiveness analysis presented in this staff report is based on a generic facility, not a specific facility. There may have been inadvertent bias in analysis performed as a part of the Technical Discussion document, as the District was forced to extrapolate costs from other air district support documentation. The District has received specific operational cost numbers from an enclosed composting facility and has used these figures in the cost-effectiveness analysis contained in this staff report.

6. The District agrees that a feasible and cost-effective threshold can differ and should differ between air districts, as the commenter points out. This is in part due to the differences in nonattainment area status and classification between different localities.

7. The District has revised the cost-effectiveness analysis presented in this staff report with the best available cost and emissions information. Wind speed is not a factor in either the air district rules appearing upon the CARB local control measures list prepared pursuant to H&S Code §39614.

8. The referenced document was selected and referenced by SJVAPCD, in support of its control measure for the composting source category.

9. The proposed rule includes those requirements determined to be feasible and cost-effective, as determined pursuant to the factors and analysis set forth in H&S Code §39614.

10. Pathogen control is not generally within the legislative mandate of the District. Potential airborne migration of heavy metals is generally regulated pursuant to provisions regarding toxic air contaminants (Please see District Rule 1320 as well as the California Air Toxics "Hot Spots" Program, the National Emissions Standards for Hazardous Air Pollutant (NESHAP) regulations and the Maximum Achievable Control Technology (MACT) standard regulations). Existing regulations for fugitive dust, as well as the effect the proposed rule has on fugitives, will minimize the effects of the fugitive dust (and its components).

11. Existing regulations for fugitive dust, as well as the effect the proposed rule has on fugitives, will minimize the effects of the fugitive dust (and its components), including any effects on downwind surface or groundwater.

12. Each of the 35 air districts in the State of California is required to individually evaluate their source specific rules based upon local nonattainment designations and other local conditions.

The adoption of a rule regulating a particular source category where no source specific rule has previously been adopted can not be considered "encouragement" of a particular source category.

13. The District did not establish any VOC reduction requirements for the proposed rule, based on the poor available emissions data. Additional VOC reductions are not currently required under the District's Ozone planning requirements. If such reductions are required in the future the District may, at its option, revisit this rule for potential VOC reductions.

14. The District does not have a SIP commitment for the composting source category, and is not proposing Rule 1133 as a State Implementation Plan element.

15. The District is requiring all those control measures that were found to be feasible and cost-effective pursuant to the analysis required by H&S Code §39614. The District has no planning or other requirements mandating the adoption of rules to the level of those required in extreme ozone areas. The District has no mandate to adopt "technology-forcing" requirements.

16. Two air districts in the State of California currently have rules with emissions levels that effectively require enclosure in some form – two of the 35 air districts throughout the state. These two districts also have the worst nonattainment classifications of the 35 state air districts. The District currently has no rule specifically applicable to the composting source category. There are currently one existing and one proposed commercial composting operation which would be potentially subject to the proposed rule. Adoption of a rule is generally not considered "encouragement" of a particular source category particularly when no current rule applies specifically to that source category.

17. The proposed rule has no impact on wildlife. The impacts of a particular land use are the responsibility of the applicable land use agency (which is the County of San Bernardino in the case of the 80 acres the commenter is referring to).

18. Every ambient air quality standard has a primary (human) and secondary (plant and animal) component, which in every case are equal. The District's existing fugitive dust rules will protect human, plant and non-human animal health equally. The proposed rule's benefits to air quality will also protect human, plant and non-human animal health equally.

19. The environmental, health and social costs (or other impacts) of any particular land use are the responsibility of the applicable land use agency.

20. The equivalent cost sharing in the District (assuming the IERCF located in Rancho Cucamonga, an enclosed and controlled facility, was serving the District) would be $13.21 per household per month, based on the annualized cost and annual operations and maintenance (of $16,036,677, less the same costs for a capped windrow facility of $183,734), divided by twelve months over 100,000 households.

21. VOC and ammonia are precursors of PM_{10} (and $PM_{2.5}$). Chipping and grinding equipment is required to obtain a District air permit and will be required to comply with all applicable air quality requirements as a condition on that permit, including direct and indirect PM_{10} emission

limits. The contingency measure is designed to anticipate $PM_{2.5}$ precursor emission controls should they be required (by a $PM_{2.5}$ NAAQS exceedance).

22. The State of California identified the VOC and ammonia control measures in its list produced pursuant to the requirements of H&S Code 39614 as PM precursor control measures.

23. The State of California identified control measures that exempted agricultural activity as the control measures the District was to evaluate. Agricultural activity is not a significant source of PM precursor or direct PM emissions within the District.

24. The District has made the indicated changes.

25. The District followed the registration requirements identified by the State of California.

26. Wet weather suspends the chipping and grinding requirement as certain chipping and grinding operations cannot be safely performed under certain moisture conditions. These definitions and requirements were taken directly from the State of California identified control measures.

27. The removal of material one inch and larger is the intent of the housekeeping requirement, so it is natural to require compliance after the housekeeping is performed.

28. "Prepared for active composting" means mixed in a windrow, so the testing cannot occur until the material is mixed.

29. The identified options are consistent with the control measures the State of California identified for District analysis – in addition, the pseudo-biofilter layer has been identified as a significant VOC control measure in and of itself.

30. The District has determined that the identified contingency measure is not currently cost-effective, but could be cost-effective in a federal $PM_{2.5}$ nonattainment scenario. The District did revise the section for improved clarity.

31. CRPE and a representative of HelpHinkley.org are on the notification list for the proposed rule.

Public Comment Letter 17

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August 7, 2008

VIA ELECTRONIC MAIL

Alan DeSalvio
Mojave Desert Air Quality Management District
14306 Park Avenue
Victorville, CA 92392-2310
United States of America

Dear Mr. DeSalvio;

This letter is submitted on behalf of Nursery Products, LLC pursuant to the request for public comment by the Mojave Desert Air Quality Management District ("MDAQMD") on a preliminary draft of Proposed Rule 1133 - *Compost and Related Operations* (hereinafter "proposed rule"). As you know, Nursery Products is developing and plans to operate a biosolids and green waste composting facility in Helendale, California. The Nursery Products project, known as the Hawes facility, has undergone extensive environmental review, including legal challenges, and will represent the state of the art biosolids composting facility. The Nursery Products facility will be regulated under certain elements of the proposed rule. In many respects, including the best management practices, the proposed rule presents a well thought out approach to achieving the stated goals of the MDAQMD and provides workable standards. In those respects, Nursery Products looks forward to working cooperatively with you and the MDAQMD staff to implement most provisions of the rule.

However in one very significant and major respect the proposed rule violates the law exceeds the authority delegated to the MDAQMD and imposes a measure that has not been fully evaluated. As such the objectionable provision found at Section (C)(4) entitled, Contingency Measure, is arbitrary and capricious and represents an abuse of discretion by the MDAQMD. The Contingency Measure is not supported by substantial evidence as required by California law. Nursery Products will exercise every legal remedy available to them, including the courts, to assure that this provision is not included in the proposed rule.

I. SECTION (C)(4) EXCEEDS THE AUTHORITY GRANTED TO THE MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT UNDER CALIFORNIA LAW

The MDAQMD operates under the authority of the State of California and has only those powers specifically provided by the state legislature. Nowhere in those authorities, is the MDAQMD granted the power to issue a rule based upon a condition subsequent when the timing and circumstance of that

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condition are unknowable and uncertain. This is true even if the condition is publication in the Federal Register by the federal Environmental Protection Agency ("EPA"). While the Clean Air Act provides the authority to implement regulations when certain conditions of non-compliance occur, such as non-attainment for PM 2.5, the Clean Air Act does not provide the MDAQMD with the authority to issue a rule that is otherwise unlawful. The proposed rule attempts to predict an appropriate technology at an uncertain future date. By the very nature of the chronological and technological uncertainty, it is impossible at this time, to analyze the proposed contingency measure, an enclosed facility. Further to do so without properly evaluating the then extant ambient air and regulatory options available to the MDAQMD at that unspecified future date is an abuse of discretion. Any attempt to impose an enclosed facility as a contingency measure in this rule, which contingency measure will be triggered at some uncertain future date is by definition impossible to meaningfully evaluate now. Thus, the analysis of the contingency measure will be based on incomplete, inaccurate analysis and therefore such contingency measure is a wholly invalid exercise of regulatory authority. See e.g., Calif. Assn. of Nursing Homes et al v. Williams (1970) 4 C.A. 3d 800.

Specifically, Section (C)(4)(b), the proposed rule attempts to impose a measure – "a completely walled, floored, and roofed structure or vessel venting to add-on control technology" -- that is neither widely accepted as to its effectiveness nor widely employed. There are only two enclosed facilities operating in the Southern California area and each of these is operated by a public agency. It is further evident that the MDAQMD has not conducted an appropriate economic analysis of such facilities, especially as may be implemented by private, regulated parties. Further, the MDAQMD has not fully evaluated such an enclosed structures for compliance with the expected PM 2.5 conditions. These few deficiencies illustrate the likelihood of a successful challenge under Cal Civ. Pro. § 1094.5, among other challenges.

California Health and Safety Code ("H&S") §§ 40703 and 40920.6 specifically require an air district make detailed findings as to the cost effectiveness of any regulation and any proposed control technology. The MDAQMD has failed to do so. First, any meaningful and accurate analysis of an enclosed facility will clearly show that the incremental emission savings associated with enclosure of a biosolids compost facility are astronomical. Were those incremental costs compared to any other control technology, the cost per ton of emission reduction for enclosure would dwarf any other rule passed by this District. Second, as to the proposed rule, detailed cost analysis cannot be accomplished now for a contingency that may occur at some unknown, unknowable future date.

The cost analysis included in the MDAQMD Technical Report is wholly deficient. Neither of the two operating enclosed compost facilities was included in the analysis. For example, the 2007 Annual Report for the Inland Empire Utility Agency shows that that facility cost about $91 Million to construct and costs about $10 Million per year to operate. That facility is about one third the size of the Nursery Products facility. Thus, the per year operating cost at an enclosed facility serving the volume that Hawes

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facility will process can be estimated at $30 Million. In addition, the MDAQMD Technical Report used a figure of around $800,000 as the annual operating cost and an emissions factor of 3.12. The emission factor of 3.12 is not widely accepted and in fact, a more likely emissions factor is about one half that; to be conservative, consider the appropriate emission factor to be 1.56. The MDAQMD Technical Report concluded that the costs of VOC reduced would be in the range of $4,912 to $9,474/ton. These values are not supported by the evidence. Using the operating costs alone (i.e., not including amortized costs of construction) from the Inland Empire Annual Report, extrapolating operating by a factor of three for the larger size facility at Hawes Road, and using a more reasonable and widely accepted emissions factor, the costs per ton of reduction of VOC will be about 60 times the costs set forth in the MDAQMD Technical Report. In other words, the costs per ton of VOC reduced will be in the range of $294,720 to $568,440 per ton VOC reduction. We are not aware of any valid regulation that approaches that cost and hence the proposed rule appears to be a per se violation of Cal H & S § 40920.7. With such outrageously high incremental costs, the proposed rule is clearly arbitrary and capricious and an abuse of agency discretion.

II. BEST MANAGEMENT PRACTICES, NOT AN ENCLOSED FACILITY CONSTITUTE THE APPROPRIATE REGULATORY STANDARD FOR PARTICULATE EMISSIONS.

The proposed rule sets forth a number of best management practices and the Technical Report evaluates the efficacy thereof. However, other best management practices, which could be employed as a contingency measure are available and were not evaluated in the Technical Report.

The MDAQMD Technical Report relied heavily upon the work of the San Joaquin Air Pollution Control District ("SJAPCD"). The SJAPCD found that best management practice at compost facilities were substantially effective in the reduction of VOCs and PM 2.5 precursors. Yet the MDAQMD Technical Report failed to evaluate a range of available contingency measures. For example, dated October 31, 2007, the California Integrated Waste Management Board, *Emission Testing of Volatile Organic Compounds for Greenwaste Composting at the Modesto Compost Facility in San Joaquin Valley*, (the "Report") illustrates the success of certain best management practices. The Report evaluated compost blankets and examined their emission reduction and cost effectiveness. The Report concludes that the compost blanket resulted in an 84% reduction of VOC emissions in the first seven days and a 75% reduction over the first fourteen days. Other studies have shown that the majority of VOC emissions occur during these periods. The compost blanket costs in the range of $100,000/year for a 200,000 ton facility and compares favorably to the $100 Million for an enclosed facility.

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III. THE INCLUSION OF THE CONTINGENCY MEASURE FOR AN ENCLOSED FACILITY IN SECTION (C)(4) IS AN ABUSE OF DISCRETION, IS ARBITRARY AND CAPRICIOUS AND WILL NOT WITHSTAND LEGAL CHALLENGE.

Section (C)(4) attempts to impose certain conditions at an uncertain future date when the U.S. EPA may find that the region is not in compliance with the PM 2.5 standard. The MDAQMD cannot know if or when that contingency may occur and hence cannot on this date attempt to impose a technology (here an enclosed facility) because by definition, the MDAQMD cannot now know what technologies will be feasible, prudent or otherwise available at that uncertain future date to meet any emission reductions that may then be needed. In addition, as the law evolves and the state of California refines the approach to the analysis of green house gas emissions ("GHG"), the MDAQMD may be faces with a more complicated weighing of factors in its rule making. In particular, the Contingency measure in the proposed rule, calls for an approach (i.e., an enclosed facility) that is extremely power intensive. The power in the Mojave Desert region is produced by a number of sources including coal and other sources that are GHG intensive. Thus, in order to be complete any analysis in a revised Technical Report of an enclosed facility must include an analysis of the GHG emissions associated with the production of the power to operate such a facility. When properly conducted that analysis will show that the actual PM 2.5 as well as green house gas emissions from an enclose facility will exceed those from an open air compost facility. A complete GHG emissions analysis must also include analysis of the avoided emissions associated with transportation of biosolids and green wastes that are not being sent out of state or at least 350 miles further that the location of the Hawes facility.

Thank you for the opportunity to point out a few of the inadequacies of the proposed rule. As set forth above, the Contingency Measure, an enclosed facility cannot be supported in the proposed rule. In addition, any present effort to impose a non-standard approach will similarly fail, as an abuse of discretion where, as here, a complete and full analysis of the enclosed facility cannot be prepared at this time in the evolution of the composting industry.

Sincerely yours,

Lynda Brothers
LBrothersLaw

Cc Karen Nowak
Chris Seney

District response to Public Comment Letter 17

1. Contingency measures are a common method in air pollution control to address specific future concerns in an expeditious manner. In fact, USEPA has requested and required many air districts in California to place specific contingency measures in their rules and plans to deal with future potential NAAQS exceedance situations (See for example MD 403.1). However, commenter is correct regarding the specification of particular technology. Therefore, the District has revised the contingency measure for clarity, and has removed the specific enclosure reference. It has been replaced with a percentage reduction requirement.

2. The District agrees that the pseudo-biofilter cap has been identified as having substantial VOC control benefits, and has incorporated that information in this staff report.

3. The District has evaluated the cost-effectiveness of the contingency measure in this staff report to the best of its ability given the information available. The district agrees that a specific technology requirement is inappropriate and has replaced it with a percentage reduction requirement. The District agrees that any existing and potential $PM_{2.5}$ control measure would necessarily be revisited in regards to both cost-effectiveness and efficacy as part of a $PM_{2.5}$ attainment planning effort.

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Public Comment Letter 18

LINDA S. ADAMS
SECRETARY FOR ENVIRONMENTAL PROTECTION

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

ARNOLD SCHWARZENEGGER
GOVERNOR

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August 8, 2008

Tracy Walters
Mojave Desert Air Quality Management District
14306 Park Ave.
Victorville, CA 92392

Dear Ms. Walters:

RE: Comments on Draft Rule 1133: Composting and Related Operations

Thank you for the opportunity to comment on these proposed regulations. As you may know, the California Integrated Waste Management Board's (CIWMB) mission is to reduce waste and promote the management of all materials to their highest and best use, while protecting public health and the environment. Toward that end, the CIWMB has promoted composting as a key tool for responsible greenwaste management for nearly 20 years.

We appreciate the Air District's technical report dated October. 22, 2007. The clear explanation of the rules under which the MDAQMD operates was particularly helpful.

The extensive citations from South Coast Air Quality Management District's (SCAQMD) Rule 1133 and San Joaquin Valley Unified Air Pollution Control District's (SJVUAPCD) Rule 4565, and the use of Rule Number 1133, do tend to invite comparison. One key difference between the MDAQMD's proposed rule and the others is that both SCAQMD Rule 1133 and SJVUAPCD Rule 4565 currently exempt facilities which exclusively compost greenwaste, as opposed to ones which also accept manure or biosolids. This approach makes particular sense for Mojave Desert AQMD Rule 1133, because the District has focused this rulemaking on particulates precursors, such as ammonia, rather than precursors for ozone. Studies by the SCAQMD show that greenwaste composting emits less ammonia than biosolids co-composting. In one study conducted by the CIWMB with support from the SCAQMD, 98% of the emission samples were below the detection limits for ammonia.[1]

Currently, the CIWMB is working with the SJVUAPCD, as well as with the California Air Resources Board (ARB) and with other air pollution control districts, to address some of the issues surrounding greenwaste composting, including uncertainty over emissions

INTEGRATED WASTE MANAGEMENT BOARD

[1] Best Management Practices for Greenwaste Composting Operations: Air Emissions Tests vs. Feedstock Controls & Aeration Techniques, CIWMB, July 29, 2003

factors, implementation of reasonable best management practices, and concerns about the cost effectiveness and applicability of Best Available Control Technologies.

Therefore, we respectfully ask you to exempt greenwaste-only compost facilities from Rule 1133 until these issues have been resolved.

Attached please find the CIWMB's specific comments on Rule 1133.

In closing, I would like to reiterate that the solid waste diversion mandates of the Integrated Waste Management Act (also known as AB 939) remain in force, and that cities and counties within your district remain obligated to reduce waste going to landfills. Composting is an important part of those efforts, and most jurisdictions have expended considerable resources to remove organic materials from the waste stream. These materials are currently turned into useful soil amendments which help farmers and gardeners save water, reduce their use of synthetic pesticides and fertilizers, and grow healthier plants. We expect that the impact of Rule 1133 on these locally supported diversion efforts will be an important consideration for the MDAQMD staff and Board in evaluating the total environmental impacts of this proposed rule.

We look forward to working with you on this rule.

Sincerely,

Howard Levenson

Howard Levenson, Ph.D.
Director, Sustainability Program

Attachment: Specific Comments on Preliminary Draft Rule and Staff Report

cc: California Integrated Waste Management Board Members
Mojave Desert Air Quality Management District Members

LINDA S. ADAMS
SECRETARY FOR ENVIRONMENTAL PROTECTION

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INTEGRATED WASTE MANAGEMENT BOARD

Specific comments about Mojave Desert APCD rule 1133

Section C 3: Composting and Co-Composting Operations General Process Controls (Best Management Practices) Requirements

(i) Testimony at hearings in the San Joaquin Valley indicates this may not be achievable at most operations. Excessive sweeping may actually increase particulate issues. Keeping areas swept to 1" is not proven to reduce VOC or ammonia emissions.
(ii) C:N testing of every new active pile may be excessive. Most operators would have to send samples out for testing, and may not receive results for a week. Therefore, results of the test will not be available during the first and most critical part of the compost process. We recommend intermittent or volume-based C:N testing as a means for composters to sharpen their skills and adjust to seasonal or contractual changes in feedstocks.
(iii) Moisture testing using the commonly applied "ball test" should be adequate to maintain moisture content within the parameters specified. We suggest allowing the use of the ball test daily on active compost piles, and weekly on curing piles, to monitor moisture levels.

a: Covering active compost piles with a waterproof cover may lead to anaerobic conditions, potentially resulting in more odors and emissions.

b: Recently, the CIWMB funded a research demonstration project to study VOC emissions reductions from capping a compost windrow with a 4-6" layer of finished compost. Evidence from the study suggests VOC emissions can be reduced by up to 75% in the first two weeks of composting by judicious use of the "biofilter compost cap." The study is available on line at: http://www.ciwmb.ca.gov/publications/organics/44207009.pdf .

c: Placing soil on top of compost piles may lead to anaerobic conditions, potentially resulting in more odors and emissions.

Section E (1) Regarding use of the ball test to determine moisture levels, 10 samples per windrow may be excessive because the ball test does not require a mixed, integrated sample. One ball test per every 50 linear feet of windrow should be sufficient. The operator should also apply the ball test in any windrow location where feedstocks are suspected of being excessively wet or dry.

Appendix A, page A-1 of the staff report. This page estimates costs for a theoretical 1500 ton-per-day aerated static pile (ASP) compost system. We have some data about the costs of the most comparable West Coast facilities:

- One facility co-composts biosolids and bulking agents outdoors in aerated static piles, but has an enclosed tipping floor. Capacity is around 850 tons per day and capital cost is estimated at $28 million, not including land.

- Another facility co-composts biosolids and bulking agents indoors. The 10-acre building pumps indoor air to a 3-acre biofilter. Capacity is around 825 tons per day and capital cost is estimated at $56 million, not including land.
- Energy costs alone for these facilities average around $500,000 per year. Therefore, the suggested operations and maintenance costs seem low.
- One facility owner who has spent years researching facility costs estimates that an aerated static pile facility that replaces an existing windrow facility requires approximately $100 in infrastructure per ton of capacity. Therefore, the theoretical 1500 tpd facility cited as costing $16.2 million (547,500 tons per year at 365 days per district throughput assumptions) could require capital costs greater than $50 million, which would generate some $26 million in interest costs at a 6% fixed rate over 15 years.
- Most compost facilities do not operate 365 days per year. If they are open on weekends or holidays, they generally do not receive much material and use this time to "catch up." It is more reasonable to base throughput estimates on a five-day week.
- Construction costs have increased since the facilities described above were built. In addition, fuel and power costs have risen rapidly.

You may wish to survey existing Aerated Pile Facilities in California to obtain current operational cost data. The three facilities, which all co-compost bio-solids with bulking agents, are:

- Synagro Regional Composting Facility, 22500 Temescal Canyon Road, Corona, CA 92883 (951) 772-2662
- Synagro South Kern Compost Manufacturing Facility, 2653 Santiago Road, Taft, CA 93268 (661) 765-2200
- Inland Empire Regional Composting Authority, 12645 Sixth Street, Rancho Cucamonga, CA 91739 (909) 993-1500

Thank you for this opportunity to comment.

District response to Public Comment Letter 18

The District appreciates the information and expertise provided by this commenter. The District agrees with the assessment regarding green waste only facilities and has revised Section C to have the Best Management Practices only apply to co-composting operations. The District may revisit the source testing requirements dependant upon operational experience, but is basing the proposed rule on the control measures identified in the CARB list developed pursuant to H&S Code §39614 as potentially feasible. The District will work closely with the CIWMB to ensure that the test methods provide accurate and reliable data. The District has explored the identified existing facilities and has used actual cost data from them in the preparation of the cost-effectiveness discussion for the proposed rule.

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Public Comment Letter 19

August 18, 2008

Do we have our priorities in the correct order? I keep reading about Nursery Products wanting open air rather than closed because it is more cost effective for them. Why should safety and reason be lost to satisfy the profit of Nursery Products?

Shouldn't the priority be the health of the people who live in the area being affected? Air quality, water and ground safety, our very health is jeopardized by air pollution and you are asking the people who live here to risk their health to save money for Nursery Products--**IT MUST BE ENCLOSED**. I know Nursery Products says it will not pollute the air but open air tossing of anything causes pollution. Bacteria flourishes in our air now, when you add sewage, medical & industrial waste with human waste to the mix it will imbed in our swamp coolers, our foods, our bodies and animals. Is Nursery Products profit more important? This stuff will recycle in our homes forever. This is not rocket science! Who is willing to risk the lives between Hinkley and Newberry Springs? Our winds are tremendous here and the prevailing winds blow from West to East.

The safety on the road (which in some places is only one lane each way) will be compromised even more when Nursery Products will add 250 to 500 trips a day, 24 hours a day, seven days a week to Hwy 58. Specifically, Hinkley does not have but one electric signal. There are many times they currently cannot cross HWY 58 from the current traffic to Las Vegas, etc. without going to Lenwood Rd. What kind of impact would an additional 250-500 trucks to Hwy 58 be? This does not just affect Hinkley but anyone using Hwy 58.

I have seen many Lenwood, Barstow, Daggett, Yermo and Newberry Springs residents hoping this would go away but not taking any action. This is not just a Hinkley problem – the wind in our communities are horrific a lot of times. Bad much of the time. You do not toss open air sludge/human waste in the air without enormous consequences (flies, air borne contamination, ground and air safety.) With much sacrifice Newberry Springs fought off Nursery Products and so did Adelanto. What does that tell our public defenders!!!!!—we don't want one here.

Where are our paid public servants who are here to protect us? Why are a few paying so much out of pocket, at risk of losing jobs and caring for their families trying to save us all and fighting this? When is profit for a company priority or even a consideration over the health of our population? Why aren't our city and government officials helping us? This is not just Hinkley's fight this is all of us down wind. Other communities have enclosed or will be enclosing their facilities, we must as well.

Sincerely,

Tricia & Norm Sheppeard

Tricia & Norman Sheppeard
28000 Turquoise Rd.
Barstow, CA. 92311

District response to Public Comment Letter 19

The District appreciates the concern that the commenter has regarding a particular proposed composting project. Most of the specific concerns raised by this commenter fall within the scope of the land use agency with approval authority over the specific project (the County of San Bernardino) – not the District. With regard to fugitive dust, the proposed rule is expected to have some minor fugitive dust benefit through housekeeping and windrow management requirements, but existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project

20. Oral Comments received at Public Workshop, 08/18/2008, with District responses

1. Rule doesn't contain enforcement provisions
1A. Enforcement provisions are specified in Division 26 of the Health & Safety Code. Specifically criminal and civil penalties for violations of any District rules and regulations are found in H&S Code §§42400 et seq.

2. Why wasn't Nursery Products cited for record keeping violations when they were in Adelanto?
2A. The District does not, and did not at the time, have a rule directly applicable to the composting source category and therefore could not cite the Adelanto facility for failure to keep records. The proposed rule contains record keeping requirements. Violation of these requirements would render the violator subject to civil or criminal penalties as set forth in H&S Code §§42400 et seq.

3. Rule requirements need to take into account high wind areas. No one size fits all of the District approach.
3A. The proposed rule applies without regard to wind speed. A violation of the proposed rule provisions remains a violation regardless of whether the wind speed is 5 mph or 25 mph. If a particular facility amasses a series of violations that are related to wind speed then the District can impose specific requirements on that particular facility to abate the problem.

4. Why is enclosure not "cost-effective"?
4A. Cost-effectiveness is determined by calculating the cost per amount of emissions reduced, usually expressed in dollars per ton of pollutant reduced. Enclosure of a large area is costly, not only to build but also to operate, and does not result in large amounts of emissions reductions.

5. Why is enclosure in the rule based on $PM_{2.5}$ rather than PM_{10} control since PM_{10} is also a health problem?
5A. The Best Management Practices have been demonstrated as cost-effective for the current PM_{10} nonattainment situation, the $PM_{2.5}$ contingency measure has been deemed cost-effective for the potential $PM_{2.5}$ nonattainment scenario.

6. Why are small backyard operations completely exempt?
6A. Non-commercial backyard operations do not have significant regional impacts. Historically, the District regulates commercial operations.

7. Can the District require a permit or license for small operations.
7A. Yes, however, this requirement is not currently in the proposed rule.

8. What happens when there are a lot of small backyard operations that cause windblown dust problems for the entire area?
8A. The District would prosecute a public nuisance enforcement action.

9. What happens about small businesses that "sell" compost out of their trucks?
9A. They would be exempt from the proposed rule as currently formulated.

10. Can there be an area wide (or community specific) limit on the total amount of open compost in a region. Would this include the small backyard folks and/or the self use operations?
10A. The County of San Bernardino or any other municipality with land use authority could create such a land use restriction.

11. What do you mean by cost-effective? Cost-effective for whom? Whose costs are considered?
11A. Costs in absolute terms, on the basis of the cost of a control measure over the emission reductions of that control measure. This is usually expressed in dollars per ton of total emissions reduced by the proposed control measure. As the proposed rule is applicable District wide, the analysis is applicable to the entire District.

12. Why are there only 2 years of record keeping? The IRS requires 7.
12A. The District has increased the recordkeeping requirement to five (5) years for all operations. Five (5) years is a standard retention length used by USEPA in many other air programs.

13. Why are social or health related costs not included in the cost-effectiveness analysis?
13A. Social and health costs (and benefits) are indirectly included in the absolute cost-effectiveness evaluation – the estimated monetary cost will be eventually borne by society and the emission reductions are assumed to benefit society.

14. Why doesn't your workshop go item by items, line by line over the rule?
14A. District staff are available for such an analysis if requested.

15. Average wind speed excludes wind storm and dust storm events. Why doesn't the rule have provisions for high wind events?
15A. The proposed rule applies without regard to wind speed. The District can impose specific requirements on a particular facility to abate problems at that facility which are related to wind speed. This is usually done through the Notice of Violation and penalty process.

16. Finished piles of compost contain aspergtillius (which causes brown lung). Finished pile may be stored in large quantities for up to 2 years. Such large piles may blow in high or moderate wind. How do you control this?
16A. Fugitive dust is controlled by other District rules and is enforced pursuant to the provisions of H&S Code §§42400 et seq.

17. Why can't all composting be done inside (Discovery Channel program on composting last Sunday – 8/17) cost-effectiveness should cover medical costs for uninsured residents.
17A. The cost-effectiveness of enclosed composting has been evaluated. Medical costs and benefits are indirectly included in the absolute cost-effectiveness analysis.

18. How would pile moisture content be measured?
18A. A moisture content test method is specified in the proposed rule.

19. What exactly constitutes covering in (c)(3)(a)(iii) and how will it be enforced.

19A. Several covering options are provided, an operator selects and employs one while keeping records of the identified action, and the District inspects the facility and reviews the records periodically. Inspections and record review will be at a minimum annually, however, additional inspections and records review can be triggered by complaints received, district staff observations, other agency reports as well as other factors.

20. Why doesn't rule contain BACT?
20A. BACT for a specific facility is applied through New Source Review, a different and existing District regulation (Regulation XIII). Imposing BACT via rule requirements are a function of the planning process and the severity of the area's nonattainment status.

21. Why doesn't rule require enclosure?
21A. The cost-effectiveness of enclosure was evaluated.

22. Why do South Coast residents have better protection than we do?
22A. South Coast has the worst air quality in the nation.

23. Why are there no pile sizes (finished or windrows) in the rule.
23A. The proposed rule applies without regard to pile size. Please note, if there are a series of violations of the rule which are related to pile size at a particular facility then the District may impose pile size restrictions on that particular facility to abate the problem.

24. What happens if we smell a compost facility and call the AQMD?
24A. The District would refer you to the appropriate local enforcement agency as the District has no authority over compost facility smell pursuant to H&S Code §41705. In this particular area the local enforcement agency is the County of San Bernardino.

25. Can the district permit the entire facility, charge a fee, and pay for local monitoring that way.
25A. Yes, however this would require additional rule making beyond that presently proposed.

26. Contingency measure should have a lower threshold than 10,000 tons due to wind.
26A. The proposed rule applies without regard to wind speed. If violations of the proposed rule related to wind speed become prevalent at a particular facility the District may impose specific wind speed triggered conditions on that facility. If violations of the proposed rule related to wind speed become a problem at multiple facilities the District will examine amending the proposed rule.

27. Can there be pile size limits to control PM emissions.
27A. Pile size was not an element of the control measures identified by the in the measures included on the CARB list produced pursuant to H&S Code §39614. If violations of the proposed rule are found at a particular facility and those violations are related to pile size then the District may impose such limitations at that particular facility.

28. Windrow size should be specified, preferably smaller than CUP.

28A. The proposed rule applies without regard to pile size. A violation from a large pile is just as much a violation as is one from a small pile. Multiple violations related to pile size may result in the District imposing a pile size limitation on a particular facility.

29. What happens if rule requirements are different from CUP. Which controls?
29A. The most stringent requirement would apply. The District would be able to enforce its rule requirements, and if there were more stringent requirements in the CUP the land use agency would enforce those requirements.

30. How much more time do we have to comment? Later comments tend to be ignored by other agencies or just responded to with "comment noted".
30A. The District extended the comment period, then added the public workshops. There will be an additional 30 day comment period on the draft rule.

31. Does this rule make the district a more attractive place to have open air composting?
31A. No, as the District does not currently have a rule. Historically, imposing a rule where there has been none tends to discourage the location of new businesses within the newly regulated source category.

32. Can the district limit the size of storage piles?
32A. No, not under the proposed rule as presently proposed. However, if there are violations of District rules at a particular location which are directly related to storage pile size the District can impose conditions as part of the Notice of Violation and penalty process.

33. Can the district require independent testing and make a company pay for it?
33A. Yes. See District Rules 217 and 310.

34. 2 years of records are too short to see compliance patterns.
34A. The District increased the record retention time to five years for all operations.

35. How are public comments to these workshops recorded?
35A. Through written notes.

21. Oral Comments received at Public Workshop, 08/19/2008, with District responses

1. Where does the cost-effective amount come from? Why is ours so low compared to other districts? How is it changed?

1A. The cost-effectiveness evaluation is based on cost of a control and the reductions caused by that control. This is usually expressed in terms of dollars per ton of emissions reduced. Please note that the cost-effectiveness evaluation was revised for this staff report using actual cost numbers from existing facilities.

2. Why is there so much disparity in cost amounts for particular technology (enclosure) and/or for cost-effectiveness thresholds?

2A. Each air district is required to perform its own cost-effectiveness analysis. Please note the previous analysis performed by SCAQMD and SJUAPCD were based upon estimated costs. The revised analysis in this staff report is based upon actual cost numbers from existing operating facilities.

3. Cost-effectiveness should be the same state wide, not vary by place.

3A. The cost-effectiveness numbers expressed in dollars per ton of emissions reduced may vary due to the data used to determine the cost of a particular control measure (estimates vs. actual costs) and the method used to estimate the emissions reductions achieved (as based upon the emissions factor for a particular operation). State law allows each air district; there are 35 districts within the state, to set its cost-effectiveness threshold based upon local conditions which includes such things as local nonattainment designation and severity of the pollution problem. The cost-effectiveness number will itself vary depending upon the data used and the threshold itself will vary based upon local conditions.

4. What exactly is our cost-effectiveness threshold and what does it mean?

4A. In this particular rule staff report, the District is saying a cost-effectiveness of 88 $/ton for VOC (as a PM precursor) is feasible, and a cost-effectiveness of 63,893 $/ton of VOC is not feasible. Therefore, in the future a control measure that costs $88 per ton of VOC emissions reduced (for PM control) will most likely be required, and a control measure that costs $63,893 per ton of VOC reduced will not be required.

5. How much higher would the threshold need to be to require enclosure of all open air composting in the District?

5A. The cost-effectiveness threshold would need to be greater than $63,893 per ton of VOC reduced.

6. Please increase the record retention to 5-7 years. Allows the tracking of trends.

6A. The retention limit has been increased to five years.

7. Commenter is disappointed that the rule does not require enclosures.

7A. Enclosure has been demonstrated to not be cost-effective.

8. There seems to be more protection for endangered species than there is for downwind residents.

8A. This is beyond the jurisdictional mandate of the District and can only be properly addressed by the legislative representatives at the state and federal level.

9. Can the issues that occurred at Adelanto facility when it was operating be used to justify enclosed facilities?
9A. No.

10. Does the district have authority over the 250/500 extra vehicles that will be caused by the Nursery Products site?
10A. No.

11. Temperature allegedly kills pathogens in compost. Why is there no temperature testing in the rule?
11A. Pathogens are the responsibility of the health and solid waste agencies.

12. Does the pH levels required by the rule conflict with the pH adjustment (via addition of lime) used to control flies and odor? If so, what standard controls.
12A. The pH levels in the proposed rule are expressed as a "not to exceed" limit. Any value below that limit will be considered compliance with the District's rule. However, if another agency has a different limit with more stringent (such as a range of pH values) the facility will need to also comply with that agency's limit.

13. Cost-effectiveness threshold needs to be varied by region due to wind and climate extremes.
13A. Cost-effectiveness thresholds vary by air district and are based upon local conditions including wind and climate.

14. Will the provisions of 1133 conflict with the provisions of 402 and 403?
14A. No.

15. Is the Nursery Products facility a >25 tons/year facility? If so what would be required then?
15A. The proposed Nursery Products facility has not, as yet, submitted an application to the District for permits and therefore an analysis of its emissions has not yet been performed pursuant to District Regulation XIII. However, given the description of the proposed project provided to the local land use agency a rough calculation of emissions subject to Regulation XIII indicated that this proposed facility would not trigger facility wide requirements under Rule 1303. Please note that the calculations performed pursuant to Regulation XIII and Federal law do not include emissions from fugitive sources or from mobile sources for this particular source category. Specific permitable units at the facility which happen emit >25lbs/day will acquire conditions on the permits to limit the emissions of those specific units to a level considered BACT for that.

16. Can the rule control truck track-out of material from the site?
16A. No, however this is within the jurisdiction of the local land use agency.

17. Does the rule require enclosure automatically for facilities >100,000 wet tons?
17A. No. VOC and ammonia control of 80% or greater will be required for large facilities if the District becomes nonattainment for $PM_{2.5}$.

18. How is the 100,000 wet tons size determined?
18A. The District will use the amount stated on the solid waste permit.

19. How is a designation for nonattainment of $PM_{2.5}$ made?
19A. By the USEPA, upon recommendation of the State of California based upon nonattainment measurements at monitoring sites within the District.

20. How is the cost-effectiveness analysis done? How is the threshold determined?
20A. Cost-effectiveness is calculated using the cost of a control measure and the emission reductions the control measure generates. It is generally expressed in terms of dollars per ton of emissions reduced by the control measure. The APCO has the discretion to select a District threshold.

21. Any standard proposed should take into account wind speed and variability.
21A. Wind speed has no bearing on the proposed rule. However, if wind speed causes a violation problem at any facility the District has the authority to impose wind speed related conditions to abate the problem.

22. How was the emissions factor used in the analysis determined?
22A. Through analysis of the emissions from composting operations. These emissions factors are used by air agencies throughout the country.

23. Is District excluding green waste composting from the entire rule?
23A. No.

24. Could the District add a specific section for BMP for green waste similar to that being developed in SCAQMD and SJUAPCD?
24A. Yes, but the District does not anticipate doing at this time in this rule making.

25. Is there a green waste composting emissions factor that is usable to support the rule?
25A. Yes.

26. Is there a green waste chipping and grinding emissions factor? Can you use it to support your rule?
26A. No there is currently no green waste chipping and grinding emissions factor. Chipping and grinding emissions are negligible due to the moisture content of the material.

27. Please update all emissions factors used in your calculations to match SJUAPCD's.
27A. The District has reviewed emission factors and has settled on the factors presented in this staff report as the most appropriate.

28. How do emissions from the Nursery Products facility interact with the Barstow rail yard?

28A. Specific proposed project interactions should be addressed as part of the California Environmental Quality Act mandated project environmental project review process by the local land use agency.

29. Does your rule analysis factor in truck traffic?
29A. No. The District has no jurisdiction over mobile sources of emissions.

30. Did your rule analysis analyze impact upon communities which are poor and of color?
30A. As the proposed rule is District-wide, a regional, ethnic or racial analysis is not called for. However, the promulgation of a rule imposing control measures where none previously existed should benefit all residents of the district including communities which are economically disadvantaged or primarily of one ethnicity or another.

31. Is the cancer risk from the rail yard combined with the impact of Nursery Products to analyze a regional cancer risk?
31A. Specific proposed project interactions should be addressed as part of the California Environmental Quality Act mandated project environmental project review process by the local land use agency.

32. Will $PM_{2.5}$ readings go up due to cumulative impacts of various projects in the Barstow area such as the Ft. Irwin personnel expansion, Ft. Irwin rail spur, BLM's alternative energy initiatives? Will the district address these issues?
32A. The District expects $PM_{2.5}$ concentrations to continue to decline over time in response to $PM_{2.5}$ precursor control efforts by SCAQMD as well as the implementation of the Diesel Airborne Toxic Control Measures (ATCMs) promulgated by CARB for mobile, stationary and portable diesel fueled equipment.

33. Why was the Nursery Products EIR "approved" by the air district?
33A. The District does not have the jurisdiction to "approve" an EIR for this particular project. That is the province of the appropriate land use agency, in this case the County of San Bernardino. The District did comment on the EIR as a commenting agency pursuant to the provisions of CEQA. As a commenting agency the District is required to look at the portions of the EIR within its expertise and indicate if they were done properly and completely. In its comments on this particular EIR the District concurred with the air quality analysis as set forth in the document.

34. 2 years of records is insufficient. What is the district going to do with the data resulting from the record keeping?
34A. The District has increased the recordkeeping requirement to five years. Records are used to verify compliance with the proposed rule.

35. Why didn't the district have a rule before?
35A. A rule was not required.

36. Why are there no enforcement provisions and/or fines in the rule? There appears to be no teeth if the company fails to comply.

36A. Enforcement provisions for all District rules and regulations are contained in Division 26 of the Health & Safety Code therefore, unlike local city/county ordinances, they do not need to be specifically included in each rule. Specific civil and criminal penalty sections are found in H&S Code §§42400 et seq. These sections set forth a range of monetary penalties ranging in dollar amounts from $500 per violation to $1,000,000 per violation. Each day a violation occurs counts as a separate violation.

37. Does the contingency measure apply whenever a facility gets bigger than 100,000 wet tons?
37A. No. The contingency measure would only apply to large facilities if the District becomes nonattainment for $PM_{2.5}$.

38. What happens if a facility closes? Does the rule have provisions for that?
38A. The rule would not apply. No, however, other agencies may have jurisdiction over closure of a composting facility.

39. What is cost-effective threshold for us compared to other districts? Can you provide a table?
39A. A cost-effectiveness threshold table is included for your information. The District's BMP cost-effectiveness of $88 per ton for VOC compares favorably to the thresholds imposed in other districts for this particular source category.

Reported Cost-Effectiveness Numbers for Air District Measures

No.	Category	District	Rule #	Title	Date*	Date Notes	C.E. Notes	C.E. ($/ton reduced)
54	Composting and Related Operations	SCAQMD	1133	General Administrative Requirements	1/10/03	Adopted	(VOC and NH3 combined)	$8,700 to $10,000
55	Composting and Related Operations	SCAQMD	1133.1	Chipping and Grinding Operations	1/10/03	Adopted		
56	Composting and Related Operations	SCAQMD	1133.2	Composting	1/10/03	Adopted		
57	Storage, Transfer, and Dispensing Operations	BAAQMD	8.7	Gasoline Transfer and Dispensing Facilities	11/6/02	Amended	(VOC) Requires testing to ensure compliance w/ARB's vapor recovery program	Not applicable
58 a	Storage, Transfer, and Dispensing Operations	BAAQMD	8.5	Organic Liquid Storage	11/27/02	Amended	(VOC) • 2002: Increase monitoring of seals and filters on floating roof tanks • 1999: Requirements for slotted guidepoles and seals on internal roof tanks • 1993: Requirements for other equipment	• $11,600 (2002$) • $1,250 • $13,000 to $15,700
58 b	Storage, Transfer, and Dispensing Operations	SCAQMD	463	Organic Liquid Storage	3/11/94	Amended	(VOC)	Data pending
58 b	Storage, Transfer, and Dispensing Operations	SCAQMD	1149	Storage Tank Degassing	7/14/95	Amended	(VOC)	Data pending

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*Date when rule was adopted or last amended.

40. Why is the contingency measure triggered at the $PM_{2.5}$ level when PM_{10} causes health problems?

40A. The District believes less cost-effective measures (such as the contingency measure) will be required should the District be designated nonattainment for $PM_{2.5}$.

41. Can the district stop a problem with a particular facility before the problem occurs?

41A. No.

42. Use of the term co-composting should be clear that it is human waste.

42A. The proposed rule uses the accepted definition for the term.

43. Is the 350 tpy of VOC coming from windrow operations regulated by the district?

43A. No. Fugitive emissions of VOC from any source may only be directly regulated by the District in certain specific circumstances. These include, but are not limited to; major stationary sources in particular source categories (for example cement kilns), operations which a New Source Performance Standard (NSPS) applies but only for the pollutant controlled by the NSPS, operations for which a National Emissions Standard for Hazardous Air Pollutants (NESHAP) applies for the pollutants regulated by the NESHAP and operations which have a Maximum Emissions Control Technology (MACT) standard but once again only for the pollutant regulated by the MACT standard.

44. Why isn't there a wind speed threshold in the rule?
44A. Wind speed has no bearing on the proposed rule. The District may impose conditions related to wind speed on any facility as part of the enforcement of a Notice of Violation to abate a wind speed related violation.

45. Most of the emissions are released from windrows when they are "turned". Can you restrict turning to times when the wind speed is under 15/20 mph?
45A. This particular suggested control measure is not an element of the measures CARB identified for analysis.

46. There are several studies that indicate high heat and high winds increase emissions from open air composting. Will you factor this in to your emissions and cost-effectiveness analysis?
46A. Only to the extent the analysis currently does – the emissions factors are derived from a similarly hot and windy air district.

47. SCAQMD staff report indicates that their rule was a PM_{10} control measure rather than a $PM_{2.5}$. Why does yours only refer to $PM_{2.5}$?
47A. The District is not responsible for statements by the SCAQMD staff. The District considers ammonia to primarily be a $PM_{2.5}$ precursor.

48. Are you going to do a Greenhouse gas analysis in the staff report?
48A. The District has addressed the expected greenhouse gas emission effects of the proposed rule to the extent possible.

49. Rule should address Toxic air emissions as well as pathogens like MRSA in finished compost.
49A. Finished compost is not a source of toxic air emissions. Pathogens are the responsibility of the health and solid waste agencies.

50. SCAQMD and SJUAPCD did their cost-effectiveness analysis using a "cost per consumer" formula. Can you do so too?
50A. The District has performed an estimated cost per household analysis for the construction and operation of a facility identical to the Rancho Cucamonga facility. The results of this analysis found a $13 per month per household incremental cost for each household in the District.

51. What happens if CARB asks the district to raise the cost-effectiveness threshold for the district? What happens to this rule if CARB does so?
51A. The District is proposing to adopt this rule in response to the provisions of H&S §39614(d); any further requirement would result in District additional rulemaking. If the State directs the District to revise the rule the District will do so.

52. How can the district put air monitors on Nursery Products door to track the emissions?
52A. Source specific monitoring is not currently required by the proposed rule. However, it is within the authority of the District to require such monitoring if problems arise.

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22. Oral Comments received at Public Workshop, 08/20/2008, with District responses

1. Why is pH an issue with PM?
1A. pH pertains to control of PM precursors VOC/ ammonia. pH was addressed in other rules that were contained on the list of potential control measures developed by CARB pursuant to H&S Code §39614.

2. Will this rule affect the ability to employ chipping and grinding in the event of fires? What if large amounts of chipped/ground materials derived from an emergency situation are sent to a composting facility?
2A. There are methods to obtain emergency exclusions from rule provisions contained in the Health & Safety Code. In addition the APCO has enforcement discretion which can be used in the case of emergency.

3. Does the new rule only apply to co-composting?
3A. Current draft applies to all composting but pursuant to a suggestion by the CIWMB the District will revise the rule so the BMP sections only apply to co-composting. Administrative and other requirements will remain applicable to green waste composting as well as co-composting.

4. Green waste yields more emissions than does co-composting – green waste should be included with respect to BMPs.
4A. The list derived pursuant to H&S Code §39614 directed us to look at issues related to co-composting – not green waste.

5. So currently the rule only applies to Ft. Irwin?
5A. The District is unsure if Ft. Irwin engages in co-composting.

6. Bio-solids/composting facilities regulated by several entities. Please evaluate 1133 to ensure that it doesn't conflict with other agency rules. Commenter urges consistency.
6A. The Distinct has requested other agencies regulating Bio-solids to comment on the rule so conflicts may be identified and fixed.

7. 1133 definition of enclosure should be re-evaluated. Consider other available technologies which offer the same benefits by are not necessarily composed of a building.
7A. Contingency measure has been revised to reference a percentage destruction/capture efficiency measure rather than a specific technology.

8. If District becomes nonattainment for $PM_{2.5}$ then the 100,000 wet ton throughput threshold is triggered?
8A. Yes.

9. What are the chances that the District would become nonattainment?
9A. The $PM_{2.5}$ trend is currently decreasing but there is no guarantee that it could not happen. This District is directly impacted by transport from South Coast air basin; however SCAQMD is working hard to clean up the $PM_{2.5}$ problem. In addition, there are state wide Airborne Toxic

Control Measures related to diesel fueled equipment which should also reduce the $PM_{2.5}$ emissions on a state wide basis.

10. Rule defines enclosure as a building. Enclosed facilities located within the inland empire were extremely costly to construct and are not the standard. Commenter points out that there are hundred of open air facilities within the State.
10A. Contingency measure has been re-worded to require reduction percentage rather than specific technology.

11. Will contingency be revisited and modified?
11A. If $PM_{2.5}$ nonattainment contingency is triggered, there would be planning requirements which would trigger a number of rule making issues. Rule 1133 would likely be one of the rules examined.

12. There is no specific emissions target associated with this rule.
12A. The District analyzed potential control measures included on the list created by CARB pursuant to H&S Code §39614. Specific emissions targets were not included in those control measures.

13. What is the relationship between the economic analyses that MDAQMD did to that done by the County?
13A. There is none. MDAQMD cost-effectiveness analysis only pertained to emission reductions achieved at various levels of control.

14. A commenter spoke in support of Helphinkley.org and in support of preservation of area wildlife such as the desert tortoise and Mojave ground squirrel. Although the District is not a land use agency, commenter encouraged reconsidering enclosure as the proposed Nursery Products site is located in desert tortoise habitat.
14A. The District does not have jurisdiction over location of particular projects. Enclosure is not cost-effective pursuant to the analysis required pursuant to H&S Code 39614(d) and the rule development process.

15. Definition of bio-solids/co-composting includes manure – is this correct?
15A. Yes.

16. More up to date information than was used in the MDAQMD analysis is available and should be used to update the District analysis.
16A. The District has updated its analysis using actual cost numbers.

17. Borrowing from SJUAPCD rules is not always a good thing. Commenter proposed that the District revisit the definition of enclosure and allow flexibility that SJUAPCD did not.
17A. District is not opposed to flexibility provided there are other technologies which provide the same level of control.

23. Oral Comments received at Public Workshop, 08/21/2008, with District responses

1. Why does the rule not require the facility (Nursery Products) to install BACT level controls?
1A. The proposed rule is not the New Source Review rule – please review District Regulation XIII – *New Source Review*, which contains the applicability requirements for BACT.

2. Why does the rule not encourage the adoption of innovative methods for control of particulate?
2A. Proper rule formulation should not specify particular technology but indicate levels of control and allow sources to determine how best to meet the level of control requires. This is not always possible and in certain cases minimum standards of technology may be required. This is why the proposed rule contains BMP provisions as well as various emission level based requirements.

3. Why is enclosure only a contingency measure?
3A. Due to its poor (high) cost-effectiveness.

4. Why can't this compost operation be closer to the source of the sludge?
4A. The District is unable to answer this question. This is more properly a question for the particular facility or the appropriate land use agency.

5. When is the staff report due out?
5A. Mid to late September, 2008.

6. Will the staff report be done before the next draft of the rule?
6A. The staff report will be completed and released simultaneously with the next draft of the rule. As the staff report is developed it may result in changes to the final draft rule.

7. How can we get a copy of the staff report and next draft of the rule?
7A. By requesting one from the District, or by downloading it from the District webpage. Your participation in this workshop and signing in on the sign in sheet will place your name on the notification list when the rule and staff report are released.

8. Will Nursery Products need to wait for rule adoption before proceeding?
8A. No, the proposed rule has no bearing on the construction of any project, merely the operation of existing and new composting facilities.

9. If Nursery Products does not need to wait for rule adoption before operating will it still have to comply with the rule provisions?
9A. Yes.

10. Pile moisture content or cover…. who determines that the demonstration is adequate?
10A. The District determines if a given operation is in compliance with the proposed rule.

11. How often will the district inspect facilities?
11A. At least annually. Inspections will be more frequent if complaints are received.

12. Why can't the district put requirements on Nursery Products to alleviate health concerns of local residents?
12A. The District will put conditions on particular pieces permitted equipment for health reasons – conditional use permit (land use permit) conditions are the purview of the land use agency.

13. Why can't the district litigate a suit over enclosure measures in the rule?
13A. The District will defend itself if sued over the proposed rule.

14. Why are staff making decisions not the Governing Board?
14A. Staff proposes rules for adoption to the Governing Board. The Governing Board is the legislative body of the District and makes the decisions.

15. Will the LEA enforce your rule?
15A. No, the District enforces its rules.

16. What factors did you consider when you did the cost-effective analysis regarding enclosure?
16A. Cost of enclosure and the emission reductions generated by enclosure.

17. Why is "cost-effective" amount different in other districts?
17A. Air districts have different air quality problems and different solutions.

18. If the San Joaquin and South Coast rules are meant to manage VOC why do you state that your rule is a PM rule?
18A. CARB listed those rules in their list of PM control measures pursuant to H&S Code 39614. Technically VOC is a PM precursor.

19. If the San Joaquin and South Coast rules are meant to manage VOC why is the contingency measure based on $PM_{2.5}$?
19A. The District believes the contingency measure will be required to control $PM_{2.5}$ should the District be designated nonattainment for $PM_{2.5}$.

20. Pathogen protection should be incorporated into the rule.
20A. Pathogens are the responsibility of the health and solid waste agencies.

21. Can this rule reference or reiterate other composting requirements from state law or other agency regulations?
21A. There is no need to reference or reiterate existing requirements.

22. How can enclosure be "not feasible" when there are enclosed facilities operating in California?
22A. Those facilities were used to evaluate the cost-effectiveness of enclosure within the District.

23. Can you use the cost per sanitation district user as a cost-effectiveness factor?
23A. The District has performed this analysis with a $13 per household in the District per month result.

24. Will the public be able to comment on the staff report?
24A. Yes, upon its release.

25. Historically Nursery Products has ignored costs imposed such as fines. What happens if despite fines a problem still persists?
25A. The ultimate enforcement action available to the District is an injunction against a non-compliant operator requiring closure.

26. The AVAQMD Board "voted" against staff to enclose a facility in antelope acres several years ago. Why can't the district board do that?
26A. The Governing Board has wide latitude in actions they can take as a board. The AVAQMD "vote" referenced was a direction to the APCO and staff, not a rulemaking action.

27. The rule as proposed doesn't have all the pieces found in the San Joaquin and South Coast rules, why?
27A. The proposed rule includes those elements in the SCAQMD and SJVAPCD rules which were found to be cost-effective.

28. Who is "in charge" of the covering and checking the facility is complying with requirements?
28A. District enforcement staff.

29. Who checks that testing is being done correctly?
29A. District enforcement and engineering staff.

30. Why does the operator not need to submit a plan to specify how testing will be done and how he will comply?
30A. Sufficient specific requirements are included in the proposed rule that the referencing the rule is adequate. Plans are generally required when the operator has a wide variety of options and needs to specify which ones he/she will use. That is not the case for this proposed rule where test methods are specified in detail.

31. Why can't Nursery Products be enclosed like the Cement Plants?
31A. Any given operation could be enclosed as a result of compliance enforcement or other regulations. Cement plants, for example, have a federally mandated opacity requirement which can only be met by enclosing most of their operations.

32. One inspection a year is not enough to ensure compliance.
32A. District experience has determined that annual inspections are adequate to determine whether a facility is complying with applicable requirements – more frequent inspections have been required in some cases. More frequent inspections are most often triggered when the District receives complaints about a facility or discovers a persistent pattern of non-compliance.

33. Self generated fires are not covered by the rule. Isn't smoke an air pollution problem?
33A. A fire would be consider an upset or emergency situation and subject to the APCO's enforcement discretion. Frequent fires would be an indication of poor operation and would lead to an enforcement action.

34. No biofilter requirements for the covers.
34A. The finished compost cover is considered a pseudo-biofilter with demonstrated VOC destruction.

35. Would like the rule to require a specific compliance plan.
35A. The requirements of the proposed rule are not complex enough to merit a separate compliance plan.

36. Is Nursery products going to be subject of enforcement actions since nothing was done in Adelanto?
36A. Enforcement actions are prosecuted in response to rule violations.

37. Why is the district limited in its discretion in this type of rule making?
37A. The District's discretion in rule making is defined and limited by State and Federal law.

38. Is Nursery products going to be subject of enforcement actions since nothing was done in Adelanto?
38A. Enforcement actions are prosecuted in response to rule violations.

39. Why is the district limited in its discretion in this type of rule making?
39A. The District's discretion in rule making is defined and limited by State law.

Public Comment Letter 24

MK page 1

Workshop on Proposed Mojave Air District Rule on Biosolids Composting Rule 3311

August 21, 2008

Comments Maureen Reilly, Sludge Watch, 416 801 4099, Maureen.reilly@sympatico.ca
c/o 408 Pioneer St Barstow Calif

1. This rule is proposed to reduce Volatile Organic Compounds in the Mojave District Air Shed. So why do the proposed rules state that the sludge composting facilities must be enclosed only when PM 2.5 exceeds federal standards? This rule derives from the South Coast Biosolids Compost Rules and the San Joaquin Valley Air District Biosolids Compost Rules…and in each of those Districts re rational was to reduce VOCs, also.

So why has the Mojave District proposed to weaken the provision requiring sludge compost facilities be enclosed over 100,000 tons per year when the other two districts require it?

The rule should state that any biosolids composting facility with over 100,000 tons per year of compostable inputs must be fully enclosed with four walls and a roof….just as is the case in the two neighboring air districts.

We were told at these workshops that the exemption was due to differences in PM 2.5. This is not the case. The purpose of the rule was to control VOC. VOCs are a problem in the Mojave airshed and residents should be protected by a requirement for any sludge compost site to be fully enclosed.

It is simply not accurate to assert that South Coast Air District and San Joaquin Air district have more stringent compost rules due to PM 2.5 conditions. Their rationale for compost sludge regs is substancially the same as the rationale for the proposed Mojave Air rules for biosolids composting.

2. Sewage sludge and sewage sludge compost contain airborne endotoxins and irritants and pathogens, including bacteria, viruses, and virulent particles. Under composting conditions in the desert – turnings of the windrows, storage, high winds, drop off, loading and unloading, particles of these pathogenic fragments will move off site and can impact downwind residents and wildlife. There needs to be provisions limiting the movement of pathogens offsite built into the Mohave Air rules for biosolids composting facilities.

3. The requirements for biosolids composting in the proposed air rules are not adequate. They need to state that the sludge must be composted in compliance with all Part 503 provisions and all California Code Composting provisions.

Additional issues: 4. The wind borne particulate from the site will spread antibiotic resistant bacteria and may promote spread of MRSA infections.

5. The records should be required to be maintained for 10 years.

REFERENCES:
http://www.mdaqmd.ca.gov/rules_plans/documents/1133%20preliminary%20draft%20d1.pdf

Proposed Mojave Air Rule for Biosolids Compostings.
Purpose is to control VOC and ammonia:

(Adopted mm/dd/yy)
MDAQMD Rule 1133 1133-1
Composting and Related Operations

6. There are already fully enclosed biosolids compost facilities in California - so it is feasible.

7. The cost analysis should look at imposing the costs on the generating community - cost per sanitation district residents.

8. The cost effectiveness analysis needs to be revisited.

9. please remember to send me the table on comparative cost effective numbers → Mojave, SCAQMD, San Joaquin

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Preliminary draft d1, 06/05/08

Rule 1133
Composting and Related Operations

(A) General

(1) Purpose

(a) The purpose of this rule is to:

(i) Limit emissions of volatile organic compounds (VOC) and ammonia from Composting and related operations. *[derived from SCAQMD Rule 1133.2(a)]*

(ii) Prevent inadvertent decomposition occurring during Chipping and Grinding operations; and *[derived from SCAQMD Rule 1133.1(a)]*

(iii) Create an emissions-related informational database on Composting and related operations through administrative requirements as part of a Composting registration program; and *[derived from SCAQMD Rule 1133(a)]*

(2) Applicability

(a) This rule applies to new and existing Chipping and Grinding activities, and Composting and related operations. *[derived from SCAQMD Rule 1133(b), 1133.1(b) and 1133.2(b)]*

(3) Exemptions

(a) The provisions of section (C)(1) of this rule shall not apply to the following facilities and/or operations: *[derived from SCAQMD Rule 1133(g)]*

(i) Portable Chipping and Grinding;

(ii) Agricultural Composting;

(iii) Nursery Composting;

(iv) Recreational Facilities Composting;

(v) Backyard Composting;

(vi) Woodwaste Chipping and Grinding facilities;

(vii) Greenwaste derived from the site and used on-site.

(b) The provisions of sections (C)(2)(b), (C)(2)(c), (C)(2)(d), (C)(2)(e), and (C)(2)(f) of this rule shall not apply to the following: *[derived from SCAQMD Rule 1133.1(f)(2)]*

(i) Chipping and Grinding activities of Greenwaste derived from the site and used on-site,

(ii) Portable Chipping and Grinding,

(iii) Agricultural Chipping and Grinding,

(iv) Landclearing Chipping and Grinding,

(v) Woodwaste Chipping and Grinding, and

(vi) Palm Chipping and Grinding activities.

(c) The provisions of section (C)(2)(e) of this rule shall not apply to chipped and ground curbside waste provided the moisture content of such waste is less than thirty percent (30%) measured in accordance with section (E)(1)

AR
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and the moisture content measurements are maintained on-site in accordance with section (C)(2)(f). *[derived from SCAQMD Rule 1133.1(f)(3)]*
(d) The provisions of section (C)(3) of this rule shall not apply to Composting and Co-Composting Operations with a design capacity of less than 1,000 tons Throughput per year. *[derived from SCAQMD Rule 1133.2 (j)(1)]*

For the rationale for the San Joaquin sludge compost rule :

Here is the rationale for implementing the San Joaquin Biosolids Composting Air Rules
It has to do with reducing Volatile Organic Compounds - NOT PM 2.5

See Electronic Page 19

http://www.valleyair.org/Air_Quality_Plans/docs/final_one_hour_adopted/SIP%20Chapter%204-RevOct2005.pdf

4.2.3.10 Control Measure J: New Rule 4565 (Composting/Biosolids Operations)

REASON FOR CONTROL MEASURE: This new rule is identified in the Ozone ROP Plan as requiring additional emissions inventory development. This rule is
designed to reduce VOC emissions created during the composting of biosolids
including sewage sludge, agricultural waste, and other greenwaste.
AFFECTED SOURCES: This category would address emissions from new and existing sources involved with composting biosolids or mixtures of biosolids
including emissions arising from the beneficial use or disposal of sewage sludge
derived from the treatment of municipal wastewater, whether from within the
District and imported from outside the District. Beneficial uses include land
application, composting, and use as landfill cover, among others. Disposal
methods include surface disposal, landfilling, and incineration. Facilities
EXTREME OZONE ATTAINMENT DEMONSTRATION PLAN Revised 10/20/05
SJVUAPCD Chapter 4 - Control Strategy
4-18
involved with these activities are classified as Biosolids Management (EIC 199-
995-0260-0000).
DESCRIPTION: This project would investigate the emissions and controls for
composting biosolids to determine if emission controls are feasible and if VOC
reductions are achievable. Biosolids are primarily generated as waste

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byproducts from municipal wastewater treatment, livestock operations, agricultural operations and commercial and residential landscaping. Many
factors increase the potential emissions inventory for this category. These
factors include:
â€¢ Growing populations in Valley communities increases demands on municipal wastewater treatment as well as generating more landscaping waste material.
â€¢ New and expanded confined animal feeding operations generate more livestock waste. The South Coast Air Quality Management District (SCAQMD) is currently working on a rule amendment to have the removal of livestock waste from the South Coast Air Basin as a control option, which may increase the Districtâ€™s inventory for this category.
â€¢ Recent changes to the CH&SC will phase out traditional open burning of agricultural waste, increasing pressure to compost.
â€¢ State and federal landfill regulations promote composting of green waste and other biodegradable materials to extend landfill capacities.
VOC emission controls are currently under investigation and could include vapor
collection and control systems, forced aeration, and windrow of materials to
generate beneficial soil amendments,
IMPLEMENTATION SCHEDULE: Adoption for this control measure will be the first quarter of 2007 with full implementation projected for the year 2010.
EMISSIONS AND EMISSIONS REDUCTIONS: Total VOC emissions from sources subject to this rule are estimated to be 0.7 tons per day in 2008. Upon
full implementation of this rule, a reduction of 0.1 tons of VOC per day is
anticipated.

Rationale for the South Coast Air District Biosolids Compost Rule:

Here is the rationale for implementing the South Coast Biosolids Composting Air Rules 1133.2
It has to do with reducing Volatile Organic Compounds - NOT PM 2.5

http://www.aqmd.gov/hb/2003/030131a.html

BOARD MEETING DATE: January 10, 2003
AGENDA NO. 31
PROPOSAL:
Adopt Proposed Rule 1133 â€" Composting and Related Operations â€" General Administrative Requirements, Proposed Rule 1133.1 â€" Chipping and Grinding Activities, and Proposed Rule 1133.2 â€" Emission Reductions from Co-Composting Operations

SYNOPSIS:

At the April 5, 2002 Board meeting, the Board received and approved a

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report on controlling VOC and ammonia emissions from composting and related operations. Based on this report, the Board directed staff to proceed with rulemaking and development of a series of rules for this industry. Proposed Rules 1133, 1133.1, and 1133.2 would implement Control Measure WST-02 â€" Emissions Reductions from Composting, which was included in the 1994 and 1997 AQMPs, and in the 1999 Amendments to the 1997 Ozone SIP for the South Coast Air Basin. These proposed rules would: 1) establish a registration and annual reporting program for composting-related facilities (PR 1133); 2) develop holding and processing time requirements for greenwaste and foodwaste chipping and grinding activities (PR 1133.1) to avoid inadvertent decomposition; and 3) reduce VOC and ammonia emissions from co-composting operations (PR 1133.2).

District response to Public Comment Letter 24

1. The proposed rule is being evaluated on a VOC control basis because VOC is considered a PM precursor.

2. Pathogens are the responsibility of the health and solid waste agencies. However, existing fugitive dust rules (District Rules 402, 403, 403.1 and 403.2) represent adequate fugitive dust restrictions for any proposed project.

3. District rules do not supersede any existing State or Federal requirements – stating so would be redundant and unnecessary.

4. As stated above, pathogens are the responsibility of the health and solid waste agencies.

5. The recordkeeping requirement was increased to five years for all operations.

6. The existing enclosed and controlled facilities were evaluated as the basis of the cost-effectiveness determination.

7. The District uses an absolute cost-effectiveness evaluation method expressed in dollars per ton of emissions reduced. The District has performed a household-based calculation which resulted in a $13 per household per month for a controlled and enclosed facility. This compares to a $0.05 per household per month for the BMPs in the proposed rule.

8. The cost-effectiveness analysis was revisited. Please see the appropriate section in the staff report.

9. The requested table was sent to the commenter.

Public Comment Letter 25

BARSTOW UNIFIED SCHOOL DISTRICT

551 South Avenue "H" ⊠ Barstow, CA 92311
(760) 255-6006 - Fax (760) 255-6007

August 26, 2008

Mojave Desert Air Quality Management District
14306 Park Ave.
Victorville, CA 92392

RE: Comments on Proposed Rule 1133

Dear Mr. DeSalvio:

Barstow Unified School District (BUSD) is concerned about the health impacts upon its students from the Nursery Products composting facility which will be located near Hinkley. We request that proposed Rule 1133 be revised to require an enclosed facility and capture of emissions and dust similar to the rules recently adopted by San Joaquin Valley Air District or South Coast Air District. This would help ease our apprehension about the emissions that will be generated by this kind of facility. In addition, substantially less restrictive rules in the Mojave Desert Air Quality Management District than in surrounding air districts makes the location of additional similar projects very attractive to the compost industry, and puts BUSD students at risk. Please require enclosure on all large composting facilities to insure the continued health of our students. We are asking for a level playing field.

Sincerely,

Susan Levine
Interim Superintendent

SL/jkc

District response to Public Comment 25

The evaluated the cost-effectiveness of requiring enclosure and determined that the cost-effectiveness was $63,893 per ton of VOC emissions reduced. This amount is above the District's cost-effectiveness threshold and therefore enclosure has been deemed to not be feasible at this time under these circumstances.

My questions and comments in Bold type **Norman Díaz**

(Adopted mm/dd/yy)

Rule 1133
Composting and Related Operations

(A) General

(1) Purpose

(a) The purpose of this rule is to:

(i) Limit emissions of volatile organic compounds (VOC) and ammonia from Composting and related operations. *[derived from SCAQMD Rule 1133.2(a)]*

(ii) Prevent inadvertent decomposition occurring during Chipping and Grinding operations; and *[derived from SCAQMD Rule 1133.1(a)]*

(iii) Create an emissions-related informational database on Composting and related operations through administrative requirements as part of a Composting registration program; and *[derived from SCAQMD Rule 1133(a)]*

1

What BMP will limit VOCs, gas and dust more than enclosure and biofilters or BACT?
List all methods of VOC reduction devices and procedures that were referenced? Are there others that were not referenced that could have been considered?
Compare performance of all methods referenced in different climates and wind conditions?
Do amounts of VOCs change in windy areas? Dry areas? Cold areas? Change of amounts between BMP and BACT in different climates, conditions?
What are the changes in VOCs and other emissions from 20 degrees in winter to 110 degrees in summer? That will be the conditions at the Hinkley Facility.
How does wind effect the VOCs at different times of year?
Can you graph the changes?

(2) Applicability

(a) This rule applies to new and existing Chipping and Grinding activities, and Composting and related operations. *[derived from SCAQMD Rule 1133(b), 1133.1(b) and 1133.2(b)]*

2

Besides composting, what are other chipping and grinding operations within the Air District?
List all and tell amount of VOCs for each? What percentage of VOCs of the District will come for the Hinkley Facility if it s opened?
What rules do these facilities follow? Any current violations and/or penalties within the District?
List of all composting operations in the Air District.
Any complaints? Any violations? Any penalties? What sizes? Estimated emissions?
How many are switching to enclosed operations?
List amount of VOCs in each? List size and all other specifications so we can compare the differences?
Any filters or other VOC controls added onto any of these facilities?
Rancho Cucamonga has some filters, why not the rest?
Why are the filters used at Rancho Cucamonga biofilter not required in MDAQMD?

(3) Exemptions

(a) The provisions of section (C)(1) of this rule shall not apply to the following facilities

and/or operations: *[derived from SCAQMD Rule1133(g)]*
(i) Portable Chipping and Grinding;
(ii) Agricultural Composting;
(iii) Nursery Composting;
(iv) Recreational Facilities Composting;
(v) Backyard Composting;
(vi) Woodwaste Chipping and Grinding facilities;
(vii) Greenwaste derived from the site and used on-site.
(b) The provisions of sections (C)(2)(b), (C)(2)(c), (C)(2)(d), (C)(2)(e), and (C)(2)(f) of this rule shall not apply to the following: *[derived from SCAQMD Rule 1133.1(f)(2)]*
(i) Chipping and Grinding activities of Greenwaste derived from the site and used on-site,
(ii) Portable Chipping and Grinding,
(iii) Agricultural Chipping and Grinding,
(iv) Landclearing Chipping and Grinding,
(v) Woodwaste Chipping and Grinding, and
(vi) Palm Chipping and Grinding activities.

3

Are any size of agriculture, nursery or other compost or grinding operations exempt from exemption? Can any size co-composting facility be exempt?
Is any size agriculture composting exempt?
If Nursery Products brings in portable equipment, then they are exempt?

(c) The provisions of section (C)(2)(e) of this rule shall not apply to chipped and ground curbside waste provided the moisture content of such waste is less than thirty percent (30%) measured in accordance with section (E)(1) and the moisture content measurements are maintained on-site in accordance with section (C)(2)(f). *[derived from SCAQMD Rule 1133.1(f)(3)]*
(d) The provisions of section (C)(3) of this rule shall not apply to Composting and Co-Composting Operations with a design capacity of less than 1,000 tons throughput per year. *[derived from SCAQMD Rule 1133.2 (j)(1)]*

4

Since this is for 1000 tons per year, which towns and municipalities will be over 1000 tons within the MDAQMD?
Who will measure moisture content? What standards of measurement?
What are penalties? How enforced? Escalating penalties?

(B) Definitions
For purposes of this rule, the following definitions shall apply:
(1) Active Compost – Compost Feedstock that is in the process of being rapidly decomposed and is unstable. Active Composting lasts until one of the following conditions is met: *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(1), SCAQMD Rule 1133.2(c)(3), SJVAPCD 4565(3.1)]*
(a) Product respiration rate is above 10 milligrams of oxygen consumed per gram of volatile solids per day as measured by direct respirometry.*[derived from SCAQMD Rule 1133.2(c)(9)]*
(b) The organic material emits no more than seven (7) mg carbon dioxide per gram of organic material per day as measured using test method in section
(E)(2)(a). *[derived from SJVAPCD 4565 3.1]*

(c) The material has a Solvita Maturity Index of five (5) or greater as measured using the test method in section (E)(2)(b). *[derived from SJVAPCD 4565 3.1]*
(d) The material has been Composted for a period of at least 22 consecutive days. *[derived from SJVAPCD 4565 3.1]*

5

Who will monitor testing and compliance? How often? What will MDAQMD regulate?
What equipment standards? Who will monitor equipment and training?
Penalties and enforcement of violations? Is the history of the offender or company taken into consideration? Will repeat offenders be handled differently?
The threshold of "22 consecutive days" in summer or winter, rain and/or wind?
What are changes in these factors due to temperature and weather conditions?
What are differences with changing wind conditions? Can the weather conditions effect the finished product after 22 days?
Graph the changes to show the differences in weather, wind and time of year.
Which times and temperatures will not make the specifications to be considered active compost?
How often will each measurement have to be taken?
How do weather and temperature conditions change the testing and results?
What if weather conditions prevent accurate testing or results? Cease operations?

(2) Agricultural Composting – Composting conducted in agricultural settings where the Feedstock consists of wastes generated on-site by the production and processing of farm or agricultural products to be used on-site.
[derived from SCAQMD Rule 1133(c)(1)]

6

Will any agricultural operations including farming and dairies ever get large enough to require VOC reduction requirements?

(3) Air Pollution Control Officer (APCO) – The person appointed to the position of Air Pollution Control Officer of the District pursuant to the provisions of California Health and Safety Code §40750 and his or her designee. *[Derived from MDAQMD Rule 1301]*

7

How many APCO are within the Air District?
Is this enough to enforce all requirements with this and other new rules?
Will more APCOs be needed in the future?
What are costs associated with APCO training and hiring? Yearly cost per APCO?

(4) Backyard Composting – Composting conducted by a household, including but not limited to, single family residences, duplexes or apartment buildings, generated on-site to be used on-site. *[derived from SCAQMD Rule 1133(c)(2)]*

8

How large before it becomes a new source and needs to be regulated?
Any military or residential units large enough to be regulated?
How large would it have to be to be regulated?

(5) Best Management Practice – A best management practice is a technique or methodology that, through experience and research, has proven to reliably lead to a desired result. Composting best management practices are Composting parameters that minimize emissions by promoting aerobic Composting conditions. *[derived from Hanaford Farms Best Available Control Technology Determination and SJVUAPCD Rule 4565]*

Why Hanaford Farms? What are the differences between Hanaford Farms and the conditions in the MDAQMD Air District?
Temperature? Wind? Rain? Evaporation?
Compare to the Adelanto Facility as comparison for problems anticipated?
What did Hanaford farms compost?
What were yearly totals of input and output?
How to compare to biosolid composting? Differences? VOC differences?
Will all the conditions below be met? Who will enforce? Penalties?

9

Scraping/cleaning of process areas—SWCAA stated that scraping or sweeping clean all process areas of actively compostable material each day is required to prevent material from being compacted. These compacted materials often give off offensive odors thus, presumably, are decaying anaerobically;

- ***Maintaining a minimum oxygen concentration of at least 5%, by volume, in the free air space of composting material;***
- ***Maintaining a compost moisture content no greater than 70%-- SWCAA stated that when compost moisture exceeds 70%, the amount of free air space may be reduced to the point where anaerobic conditions are likely to develop. In addition, excessive amounts of water surrounding composting material can slow oxygen transfer to the point that anaerobic conditions develop on the surface of the material even when adequate oxygen exists within the free air space; and***
- ***Maintaining carbon to nitrogen ratios of piles of at least 20:1***

(6) Biosolids – Solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Biosolids includes, but is not limited to, treated domestic septage and scum or solids removed in primary, secondary, or advanced wastewater treatment processes. Biosolids does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during the preliminary treatment of domestic sewage in a treatment works. *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(9)]*

Will any be dry and be considered biosolids?
Will all biosolids be acceptable?
Who will monitor biosolid contents and contaminants?
10
Will records be public? How to access records?
Who will monitor incoming material? Enforcement and penalties?
Are food waste, hospital waste, industrial waste considered biosolids?
How to ensure no primary from preliminary screening are included?

(7) Bulking Agent – Additives or amendments mixed with Feedstock in order to adjust the moisture level, carbon to nitrogen ratio, or porosity to create a favorable condition. *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(2)]*

Where is a list of acceptable materials?
Where is a list of unacceptable materials?
Who will monitor? Enforcement? Penalties for non compliance?

11

In Hinkley, 43 trucks of painted particle board were dumped adjacent to the site. Who is responsible if this material is used as bulking agent?
Is it legal if painted? Glued wood? Fine dusty material? Particle board? Railroad ties? Treated wood? List of legal and illegal woods?
How much storage? How long can it be stored?

(8) Calendar Days – Any days of the year, excluding official federal and state holidays. *[Derived from SCAQMD Rule 1133.1(c)(2)]*
(9) California Air Resources Board (CARB) – The California State Air Resources Board the powers and duties of which are described in Part 2 of Division 26 of the California Health & Safety Code (commencing with section 39500). *[derived from MDAQMD Rule 1165]*
(10) California Integrated Waste Management Board (CIWMB) – The California Integrated Waste Management Board the powers and duties of which are primarily described in Chapter 3 of Part 1 of Division 30 of the California Public Resources Code. (commencing with section 40400).

12

The CIWMB put extra conditions on the Hinkley Sludge dump due to its history in Adelanto and lack of ability for the LEA to enforce any conditions on the Adelanto Dump. Will the MDAQMD work in conjunction with the CIWMB on the extra inspections and oversight required by the CIWMB permit?
Will MDAQMD make similar conditions to the CIWMB? Why or Why not?
Does the MDAQMD trust the LEA to make the Sludge facility comply with all rules and conditions?
Did MDAQMD ever find fault with Adelanto Sludge Facility?
Penalties? Timeline of complaints to compliance?
How will process be better this time?
How would the MDAQMD Staff rate their oversight in Adelanto?

(11) Chipping and Grinding – Activity that mechanically reduces the size of Greenwaste, Woodwaste, and/or Foodwaste. *[derived from SCAQMD Rule 1133(c)(3)]*

13

Foodwaste, please describe and define?
Is foodwaste permitted?
Animal carcasses? Medical waste? All medical waste? Any exceptions?
All woodwaste? Is bark beetle wood waste acceptable?
Is the Bark Beetle 100% eradicated in the typical compost process?
Does temperature effect Bark Beetle composting? Does wind?

(12) Compost – The product resulting from the controlled biological decomposition of biological materials. *[Derived from SCAQMD Rule 1133.2(c)(7)]*

14

Can you be more specific?
Moisture content? PH reading? Chemical levels?
What chemicals are tested for?
How often tested? Who tests? Oversight and penalties?

(13) Composting – Process in which solid organic waste materials are decomposed in the presence of oxygen under controlled conditions through the action of bacteria and other microorganisms. *[Derived from SCAQMD Rule 1133.2(c)(8)]*

What materials are considered organic waste materials?

15

Where is a list of acceptable and unacceptable organic waste materials?
How much oxygen? What are limits on oxygen to stop composting?
Who will monitor? Testing and test parameters? What equipment?
Training and standards of workers doing tests?

(14) Compostable Material – Any organic material that when accumulated will become Active Compost as defined in section (B)(1). *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(11)]*

16

List of acceptable and unacceptable organic materials?
If sited and approved, and the rules change, will this rule change?
How often updated sited references? *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(11)]*
Who will update? When? Where to access newest standards?
Date of standards used in this rule? Next anticipated update of rules?

(15) Composting Operations – Facilities involved in Composting organic materials including, but not limited to, Greenwaste, Biosolids, Manure and Foodwaste. *[derived from SCAQMD Rule 1133(c)(7)]*

(16) Co-Composting – Composting where Biosolids and/or Manure are mixed with Bulking Agents to produce Compost. Co-Composting involves both the active and curing phase. *[derived from SCAQMD Rule 1133.2(c)(6)]*

17

Where is a current list of all businesses, operations and facilities that would be included under composting and co-composting in MDAQMD District?
How many operations and/or businesses are over 100,000 tons input a year?
How many would be considered co-composting compared to just composting?
Will Hinkley facility be considered Co-composting?

(17) Curbside Greenwaste – Greenwaste that is collected from receptacles designated for residential household Greenwaste. Curbside Greenwaste also includes screened Curbside Greenwaste containing only grass clippings, leaves, and/or twigs that is not considered Greenwaste in (B)(24). *[derived from SCAQMD Rule 1133.1(c)(5)]*

18

Will curbside greenwaste be allowed if it was sited in Adelanto for a brief fly problem?
Will type of effects dose greenwaste have on VOC emissions when mixed with sludge?
Are there any standards for quality of Curbside Greenwate?
Who regulates? Enforces? Penilties?
If extreme pesticides are used in the greenwaste, will it affect the final product?
If operation states it will not accept curbside greenwaste and is found to have accepted curbside greenwaste, what is the penalty? 2nd offense?
Will history of applicant or operation effect oversight, regulation and penalty?
If Greenwaste leaves the site by wind or mecanical means, will MDAQMD regulate?

(18) Curing Compost – The phase of the Co-Composting process that begins immediately after the end of the active phase of Composting. Curing Composting lasts until one of the following conditions is met:
(a) Product respiration rate is below 10 milligrams of oxygen consumed per gram of volatile

solids per day as measured by direct respirometry. *[derived from SCAQMD Rule 1133.2(c)(9)]*
(b) Emits no more than four (4) mg CO_2-C per gram of organic material per day, as measured using the test method in section (E)(2)(a). *[derived from SJVUAPCD Rule 4565 3.21]*
(c) The Compost has a Solvita Maturity Index of 7 or greater, as measured using the test method in section (E)(2)(b); or *[derived from SJVAPCD Rule 4565(3.17.2)]*
(d) The material has been Composted at least 40 consecutive Calendar Days after the Active Composting phase. *[derived from SJVAPCD Rule 4565(3.17.3)]*

19

Who will test? How often are records taken?
Standards of equipment and personnel training? Who checks? Penalties?
If SJVAPCD or SCAQMD standards change, how will it affect the MDAQMD standards of this and other rules?
Since windrows are permitted for 30 ft wide x 15 ft high, instead of standard 15 ft wide x 5 feet high, how will that affect emissions, VOCs, composting and curing?
Will width and/or height of windrow effect the emissions, VOCs or possible uncomposted materials escaping into the surrounding airspace?
How will larger windrows affect the Solvita Maurity Index or oxygen consumed?

(19) District – The Mojave Desert Air Quality Management District, the geographical area of which is described in District Rule 103. *[derived from MDAQMD Rule 103]*

20

If composting is done on an adjoining Air District, how much VOCs are acceptable to cross into the MDAQMD District before action is taken?
If any sources of pollution come across from the SCAQMD and/or the SJVAPCD Air Districts or Arizona Air Districts, will we enforce our Air Standards on the source of the fugitive emissions?
Why didn't Twenty Nine Palms, Needles, Trona, Joshua Tree, Yucca Valley, Blythe, Mojave and other MDAQMD affected cities get public workshops on Rule 1133? Barstow, Hinkley. Helendale and Victorville all have workshops and are within 40 miles of each other, inside an Air District that is 100+miles across. Is the entire Air District being represented in a District wide rule is being written by only 4 communities?

(20) Facility – A portion of real property that is on one or more contiguous or adjacent properties, all of which are under common ownership or control. *[derived from SJVUAPCD Rule 4565 3.20]*

21

If dust off access roads to the facility, is that dust and debris considered into the facility being sited?
Will any curing take place on the other 80 acres not permitted by the County?
How much can be stored on the second 80 acres and adjoining properties?
Can this finished material be eaten as they say the Sludge is?
What will Nursery Products need to expand from MDAQMD?
How often will MDAQMD inspect Hinkley facility? What is the number of inspections of any future compost facilities?
Did MDAQMD ever site Nursery Products while operating in Adelanto?

For what? How often? What penalties?
How will the history of Nursery Products in Adelanto affect the new much larger facility in Hinkley?
Will MDAQMD issue a permit? If not, why?

(21) Feedstock – Any Compostable organic material used in the production of Compost or chipped and ground material including, but not limited to, agricultural material, Greenwaste, Foodwaste, Biosolids, and mixed solid waste. Feedstocks shall not be considered as Bulking Agents. *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(19)]*

Does all this feedstock material count into their total weight allowed?
Will 200,000 tons be allowed of these materials per year?
Sludge and greenwaste both considered feedstock?
22
What are estimated VOC emissions from each of these feedstocks?
How will weather, temperature, climate and wind affect emissions of each feedstock?
Who will oversee quality and quantity of feedstock material?
Who tests and when can tests be seen by public?
How often tests and equipment verified by independent parties?
What penalties and fines for non-compliance with rules?

(22) Finished Compost – A humus-like material that meets at least one of the following conditions: *[derived from SJVUAPCD Rule 4565 3.21]*
(a) Emits no more than four (4) mg CO_2-C per gram of organic material per day, as measured using the test method in section (E)(2)(a).
(b) Has a Solvita Maturity Index of 7 or greater, as measured using the test method in section (E)(2)(b).
(c) Has completed both the active and curing phases of Composting.

If finished product blows off site, is there a violation?
Who tests the finished material?
Who verifies tests, equipment and personnel doing tests? How often?
How often will tests be done?
What procedures used?
Since Nursery Products has been granted much larger windrows and 50 foot piles of finished product on site, how will this affect testing?
23
Is this different than at other facilities with normal size windrows and less storage capability? If not, why not different?
Shouldn't tests be done differently if facility is different?
If dangerous or poor quality feedstock is brought, who is liable for bad compost?
Are there other tests that show same results and meet parameters?
Are there different tests which can be used? Which ones?
What are emissions on finished compost?
How much material will need to be stored until the 25 tons/year VOC limit is reached?

(23) Foodwaste – Any food scraps collected from the food service industry, grocery stores, or residential food scrap collection. Foodwaste mixed with Greenwaste is considered Foodwaste. *[derived from SCAQMD Rule 1133(c)(8)]*

24

Then is foodwaste mixed with greenwaste counted with the weight with Sludge?
If more than 200,000 tons is brought in, will MDAQMD object?
Will emissions be higher?
How many tons of VOCs will MDAQMD allow off the Hinkley Sludge dump?
25 tpy is limit, 357 tpy approved, what if they go over 357 tons?
Will wind affect VOCs from windrows or curing piles?
Is any dust allowed to blow off site?
Will road into dump be paved as promised?

(24) Greenwaste – Organic waste material generated from gardening, agriculture, or landscaping activities including, but not limited to, grass clippings, leaves, tree and shrub trimmings, and plant remains. *[derived from SCAQMD Rule 1133(c)(9)]*

25

Will Nursery Products be allowed all greenwaste?
In their EIR, they are not allowed greenwaste, who will monitor?
Who will test for invasive pests and weeds?
Who will inspect test and qualification of equipment and tests?
Do wind limits count for mixing, moving and loading of greenwaste?
What greenwaste is not allowed?
Since Nursery Products blamed all fly issues on grass clippings, will any be allowed?
Will Nursery Products be allowed any curb side waste? From where? How much?
Will future open-air Sludge dumps be allowed grass clippings?

(25) Local Enforcement Agency (LEA) – The local agency designated as the enforcement agency by the CIWMB pursuant to Article 1 of Chapter 2 of Part 4 of Division 30 of the California Public Resources Code (commencing with section 43200).

26

Will MDAQMD pay more attention to LEA's lack of enforcement of CUP and other rules broken, as in Adelanto?
The CIWMB has chided the work of the LEA in Adelanto, does that concern the MDAQMD?
The CIWMB will do monthly unannounced inspections indefinitely do to poor enforcement by LEA, will MDAQMD also do more inspections?
Does MDAQMD Staff feel that the LEA in Adelanto did a proper job of enforcing the CUP and other rules?
If so, then why all the problems?
Will the MDAQMD refer all problems to the LEA as in Adelanto? Why?

(26) Manure – Accumulated herbivore or avian excrement which includes feces, urine, any bedding material, spilled feed, or soil that is mixed with feces or urine. *[derived from Title 14 CCR, Division 7, Chapter 3.1, §17852(a)(25)]*

27

Will Nursery Products use any manure in their facility?
How much is allowed? Who will monitor?
How does manure differ from greenwaste and Sludge in VOC emissions?
Will manure be checked for any materials that may be dangerous if blown off site?
What fines or penalties if blown off site or other rules broken? Are multiple offences more?

(27) Mixed Greenwaste – Curbside Greenwaste that is mixed with Non-Curbside Greenwaste. *[derived from SCAQMD Rule 1133.1(c)(10)]*
(28) Non-Curbside Greenwaste – Greenwaste that is not collected from receptacles designed for residential household Greenwaste. Curbside Greenwaste or Mixed Greenwaste that is screened and contains only large woody material (larger than 3 inches in any dimension) such as tree trimmings and branches is also considered to be Non-Curbside Greenwaste. *[derived from SCAQMD Rule 1133.1(c)(11)]*

28

What are limits of quantities or variety of materials?
How will different materials affect emissions, VOCs, dust?
Will wind effect the process? More VOCs produced by different greenwaste, depending on moisture, density, what size material is ground?

(29) Nursery Composting – Composting conducted at a nursery using Feedstock generated on-site to produce Compost for on-site use. *[derived from SCAQMD Rule 1133(c)(10)]*
(30) Operator – Any person who owns, leases, supervises, or operates a Facility that processes Compost or Co-Compost, or equipment on such a Facility. *[derived from SJVUAPCD Rule 4565 3.28]*

29

Will operator be responsible for all workers actions?
Will operator be responsible for all trucks entering and leaving main Highway 58?
Will operator be responsible for any material spilled enroute or carrying finished materials away?
If not, then who will be responsible?

(31) Palm Chipping and Grinding – Any activity that mechanically reduces the size of palm tree waste. *[derived from SCAQMD Rule 1133.1(c)(12)]*
(32) Portable Chipping and Grinding Operation – Chipping and Grinding equipment operating under a state or local portable permit or otherwise exempt from permitting.

30

Will Nursery products have any exempt equipment?
How will inspect and verify? Who will enforce?
What penalties, fines involved with any problem, violation or wrong doing?
What about multiple violations?

(33) Pile – Compost material that is heaped together. *[derived from SJVUAPCD Rule 4565 3.30]*

31

What are size limits? Height to short, too tall, if not ground?
Do piles ever need to be covered?
Any limitations on pile placement on site?
How close can raw materials be to finished piles?
Distance required in between windrows?
Does windrow count as a pile?
Does size of windrow effect emissions?
EIR states 1000 ft x 30ft wide x 15 ft tall while most common Sludge composters windrows are shorter, 15 ft wide and 6 ft tall due to equipment limitations.
Will the larger windrows change the emissions, and uniforminality of the compost?

Will the wind affect the larger windrows more than the smaller size?
Will rain, heat or cold affect the larger windrows differently?
How much difference in emissions, dust, VOCs, gases, daily and per year?

(34) Rainy Day – Any day with at least 0.05 inches of rain reported by the National Weather Service or a cooperative weather reporting station for the site closest to where the Chipping and Grinding activity occurs. *[derived from SCAQMD Rule 1133.1(c)(14)]*

How far away is closest station? Can one be brought closer for accuracy?
How will rain affect emissions?
Any conditions warrant cease of operations?
If many windrows get too wet, how much time do they get to fix the problem?
32
Is covering the windrows ever required? Why not?
If in a wet year and Sludge is washed off site, will operator be responsible to recover and capture all runoff water and material?
Who will enforce?
Will MDAQMD have any rules with wet material drying out and being allowed to blow off site? What rules? What penalties and fines?

(35) Recreational Facilities Composting – Composting conducted at parks, arboretums and other recreational facilities using Feedstock generated on-site to produce Compost for on-site use. *[derived from SCAQMD Rule 1133(c)(16)]*
(36) Solvita Maturity Index – An index that defines the stage where Compost exhibits resistance to further decompositions, as tested by the Solvita Maturity Test. *[derived from SCAQMD Rule 1133.2(c)(10)]*

Are there other tests that measure the same parameters?
If SCAQMD changes, will MDAQMD automatically change?
Can MDAQMD decide to use different tests?
Who tests, how often? Who qualifies testing equipment and people taking tests?
33
Who will test equipment? Who will verify testing?
Does history of Sludge company matter? Past violations? More oversight?
Will larger windrows change testing procedures?
Does SCAQMD specify windrow parameters to assure test accuracy?
Will MDAQMD test the results on larger windrow size?

(37) Throughput – The mass of Biosolids, Manure, or Greenwaste in tons per year as received by the Facility and processed through Composting excluding recycled materials. *[derived from SCAQMD Rule 1133.2(c)(18)]*

Will MDAQMD monitor the throughput?
Who will? Who will monitor equipment and personnel qualifications?
34
Will amount of throughput effect amount of emissions? How much?
Taken separately, what are the differences in Sludge, manure or greenwaste emissions?
Will different combinations of throughputs effect emissions? VOCs?

(38) Tipping Fees – Money or other financial benefits received by a Facility, owner, or Operator in exchange for the Facility, owner, or Operator accepting Greenwaste,

Biosolids, animal Manure, or poultry litter. *[derived from SJVUAPCD Rule 45653.34]*

35

How much is the tipping fee? Who pays this fee?
Will a higher tipping fee allow different material to be accepted?
Does ratepayer pay the tipping fee?

(39) TMECC – Test Methods for the Examination of Compost and Composting by the US Composting Council Research and Education Foundation. *[derived from SJVUAPCD Rule 4565 3.35]*

36

Are there other tests that measure the same parameters?
If SCAQMD changes, will MDAQMD automatically change?
Can MDAQMD decide to use different tests?
Who tests, how often? Who qualifies testing equipment and people taking tests?
Who will test equipment? Who will verify testing?
Does history of Sludge company matter? Past violations? More oversight?
Will larger windrows change testing procedures?
Does SCAQMD specify windrow parameters to assure test accuracy?
Will MDAQMD test the results on larger windrow size?

(40) United States Environmental Protection Agency (USEPA) – Refers to the Administrator or the appropriate designee of the United States Environmental Protection Agency. *[derived from MDAQMD Rule 1201]*

(41) Volatile Organic Compound (VOC) – Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and those compounds listed in 40 CFR 51.100(s)(1). *[derived from MDAQMD Rule 1162(b)(48)]*

37

Where is a copy of the list of VOCs?
Can MDAQMD add additional VOCs to list?
Will all VOCs be tested for? How often? What parameters?
Can a different test be more specific or more accurate? Which tests?
Are there more through tests?
Will MDAQMD test at Hinkley school or Sludge site if asked?

(42) Wet Weather Conditions – Weather conditions following a Rainy Day not to exceed 10 days. *[derived from SCAQMD Rule 1133.1(c)(15)]*

38

Will wet weather conditions effect emissions? How much?
How will a rainy year like 2003 or a "el nino" year effect emissions?
Will MDAQMD ever force actual covers on the composting materials in wet conditions?
Will MDAQMD ever force actual covers on the composting materials in windy conditions?
Does MDAQMD worry about regrowth of pathogens, ecoli or fecal cloiforms from Sludge? Any circumstances that might add to the chances of any regrowth?

(43) Woodwaste – Lumber and the woody material portion of mixed demolition wastes and mixed construction wastes. [derived from SCAQMD Rule 1133(c)(13)]

Does all construction waste count? Sheetrock? Partical board? Painted wood?
Define limits of "construction wastes"? Concrete? Metal? Glue? Paint? Glass?
Will woodwaste be delivered in covered trucks? Can MDAQMD require that woodwaste

be delivered in a covered truck?
Will woodwaste be checked for pesticides or invasive plants or animals?
Can invasive plants and pests survive the minimum compost requirements?
Would enclosure help stop off site migration of pesticides, chemicals, viable seeds?
Would MDAQMD regulate off-site migration of any of these?
Landscape and construction waste is not checked enough and can be stored on site, will this material's potential to blow off site be regulated by MDAQMD with rule 1133?
Chipping and grinding of landscape, woodwaste, construction waste will be a very dusty procedure, can the MDAQMD add a wind stipulation of 15 MPH to suspend work on woodwaste?

39

If stored on site, will the emissions off the woodwaste be regulated by the MDAQMD?
What would be the level of emissions that would allow the MDAQMD to regulate?
Any dangers to the people, tortoises, or other wildlife from the fugitive dust off the woodwaste? What records will be kept on the origen of the woodwaste?
Will there be tests for aspestis, or other dangerous materials found at construction sites?
Characterize "mixed demolition wastes and mixed construction wastes"?
Who regulated what is allowed? What tests are done? What quality control on the material that will become fugitive dust once stored on site?
What detail of origin, quantity, quality, contents, are recorded?
Can public have access to the records? How often?
Digital records requirement for better tracking and independent and public oversight?
Can MDAQMD require better records of potential fugitive dust?

(C) Requirements
(1) General Administrative Requirements: *[derived from SCAQMD Rule 1133(d)]*
(a) Any person engaged in Chipping and Grinding and Composting Operations shall:
(i) No later than 60 days after rule adoption, Operators of any existing Chipping and Grinding activities and Composting Operations shall register with the District by submitting complete and applicable information required in accordance with section (C)(1)(b) of this rule.
(ii) Prior to start of operation, Operators of new Chipping and Grinding activities and Composting Operations shall register with the District by submitting complete and applicable information required in accordance with section (C)(1)(b) of this rule.
(iii) No later than July 1 of every year thereafter, Operators of Chipping and Grinding activities and Composting Operations registered with the District shall update their registration information by providing any changes to the information submitted in accordance with section (C)(1)(b) of this rule. (b) The registration and annual update shall at a minimum include the following information:
(i) Facility name;
(ii) Facility location address and mailing address;
(iii) Facility legal owner(s), contact person, title, telephone number, and mailing address;
(iv) Facility Operator(s), contact person, title, telephone number, and mailing address;
(v) Number of employees at the Facility;
(vi) Applicable California Integrated Waste Management Board's permit number;

Does public have access to these records? How often? How current?
Who checks the information? Will employees count all truck drivers?

40

Who regulates the trucking and truck driver's status and qualifications?
Will facility be responsible for material dropped off trucks entering or leaving the facility? How far away from gates are Composters responsible?
Who will check for violations and any clean-up needed?

(vii) Type and amount of materials received and type and amount of products produced for the preceding year;
(viii) Facility design capacity (Throughput) in tons per year;
(ix) Facility actual Throughput in tons per month for the preceding calendar year. For new facilities, projected Throughput must be provided;
(x) Feedstock description;
(xi) Facility process description including, process diagram and a description of Chipping and Grinding operations and Compost methods used (if applicable);
(xii) Published tipping fee schedule for the preceding calendar year by Feedstock; and
(xiii) Number of air-quality related enforcement actions issued in writing against the Facility by the Local Enforcement Agency and the California Integrated Waste Management Board for the preceding year.

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How detailed will these lists be? Who checks the correctness? Who is responsible? What are the penalties and fines? What about multiple violations?
Will written complaints be included? Telephone complaints included? How are complaints compiled?
Will this be the tipping fee total amount accepted? Will the list be broken down by individual trucks? Drivers information for later verifacation?
Does public have access to the records? How often?
Origin of all feedstock and any disease, pests or pesticides included in all descriptions?
To understand what impact any fugitive dust and/or VOCs might have, the description needs exact details of what the feed stock consists of and what it will break it down into and who to contact if any questions on the origin or history are developed. How specific does the process description? How does the MDAQMD oversee this throughput, project description, and feedstock description?
Who will clean trucks?
(xii) Published tipping fee schedule for the preceding calendar year by Feedstock; and

42

What is the rest of this sentence?

(2) Chipping and Grinding Operation Requirements:
(a) Any person engaged in a chipping or grinding activity shall:
(i) Remove Foodwaste from the site or use Foodwaste for on-site Composting within two Calendar Days of receipt. *[Derived from SCAQMD Rule1133.1(d)(1)]*
(ii) Chip or grind, or use on-site, or remove Curbside Greenwaste from the site within three Calendar Days. *[Derived from SCAQMD Rule 1133.1(d)(2)]*
(iii) Chip or grind, or remove Non-Curbside Greenwaste from the site within 14 Calendar Days of receipt. *[Derived from SCAQMD Rule 1133.1(d)(3)]*
(iv) Chip or grind, or use on-site, or remove Mixed Greenwaste from the site within seven Calendar Days of receipt. *[Derived from SCAQMD Rule 1133.1(d)(4)]*
(v) Remove chipped or ground Curbside Greenwaste from the site or use chipped or ground Curbside Greenwaste on-site within three Calendar Days of being chipped and ground. *[Derived from SCAQMD Rule 1133.1(d)(5)]*

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Who regulates and checks compliance with these conditions? Does MDAQMD have any authority over any of these requirements? What are anticipated emissions expected off the greenwaste? Emissions off foodwastes? Reason for difference between 3 days for curbside waste and 14 days for non-curbside waste?
Can MDAQMD require tighter restrictions dealing with this material?
Due to dust and VOC potential, all chipping, grinding and storage should be done indoors with filters and negative pressure. Can MDAQMD require this?
If removed after time limit, can the material return? Can it stored on the adjacent property? Does the weight get subtracted from the yearly total if material leaves site?

(b) Any person engaged in a chipping or grinding activity shall maintain the following records: *[Derived from SCAQMD Rule 1133.1(d)(6)]*
(i) A copy of the Facility's District registration and annual updates submitted in compliance with section (C)(1). (ii) Records of date, type, and amount of Greenwaste and/or Foodwaste received; and
(iii) Records of date, type, and amount of Greenwaste and or Foodwaste removed from the site, and location where they were transferred to.
(iv) Records of dates of Rainy Days and Wet Weather Conditions and description of specific conditions that limited normal operations.
(v) Records of moisture content measurements as determined in section (E)(1).
(vi) Records of dates and amount of Curbside Greenwaste chipped and ground.

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Can records be digital with public access? Where are records of origin? This will help trace any dangerous emissions back to point of origin. If dust or emissions turn out to have some dangerous substances, then the MDAQMD needs to be able to find the source of the material and se if any other material contains the potential for dangerous dust or emissions off-site. Can MDAQMD require origin of all material allowed on site?
Records should be entered into a database daily that MDAQMD and other agencies can track movement of all material associated with these facilities. The public should have acess to these and all records. The records should be kept 10 years and verified monthly by independent sources.

(3) Composting and Co-Composting Operations General Process Controls (Best Management Practices) Requirements:

45

Why not BACT?
What is cost difference between BMP and BACT?
What is the emission difference between BMP and BACT?
What are the PM potentials and actual PM movement through operation of a facility that is BACT or BMP?
How do they differ in amounts of dust, VOCs and gases released?
Would the Adelanto Compost facility comply with these BMP?
Who will enforce? How often? Paperwork or walk-through inspection?
What are penalties and fines? Multiple violations?
Time table of enforcement to compliance?

(a) Any person engaged in Composting or Co-Composting operations shall:
(i) Scrape or sweep, at least once a day, all areas where Compostable Material is mixed, screened, or stored such that no Compostable Material greater than one inch (1") in height is visible in the areas scraped or swept immediately after scraping or sweeping, except for Compostable Material in process Piles or storage Piles; and *[derived from SJVUAPCD*

Rule 4565 Table 2]

Scrape or sweep all holidays and the other 365 days in operation?
All areas where compost stored? Area around windrows swept every day?
46
Cured compost areas swept everyday?
Scape and sweep everyday around the windrows? Around all piles?
Finish material is non compostable, so this rule does not apply?
Except for dust rule, can MDAQMD regulate the finished rule?

(ii) Establish initial carbon to nitrogen ratio of not less than 20:1 in Active Compost Piles by testing the material when it is prepared for Active Composting using the test method in section (E)(3)(c). Testing shall be done on the day the materials are mixed and be representative of the initial composition of each new Active Compost Pile; and *[derived from SCAQMD Technology Assessment for proposed Rule 1133, March 22, 2002(upper limit) and SJVUAPCD Rule 4565 Table 2(lower limit)]*

Again the size of piles comes into question. How can a 30x12 foot pile be tested the same as a 15x5 foot pile? Nursery Products windrows are permitted for 30ft x 12ft x 1000ft, is there an adequate turner built to mix that size adequately?
47
Will the size or shape of windrow adjust the testing method, frequency or accuracy?
Will more samples and more testing be required?
How will 8 employees get all this work done?
Will operations be halted if the operator can't keep up with record keeping or test taking?

(iii) Maintain moisture content between 40 percent to 70 percent and test daily in Active Piles and monthly in Curing Piles, or Cover Active and Curing Piles within three hours of turning with one of the following: *[derived from SJVUAPCD Rule 4565 Table 2]*
a. A waterproof covering; or
b. At least six inches (6") of Finished Compost; or
c. At least six inches (6") of soil.

What are penalties, fines and options for piles too wet or too dry?
As in 2003, it rained for a month, how will the compost be kept dry?
How many days is the composter allowed to fix problem?
48
How will 6' of any material fix rain making the compost too wet?
Why is the finished compost not under this rule?
A waterproof covering should be required at all times to maintain proper moisture and protect any wind issues.
Even the finished piles should be completely covered by waterproof material.
If a windrow or curing pile is added to, will it be retested for moisture and/or PH?

(iv) Maintain pH below 8.0 and test monthly in active and curing Piles; and [derived from SCAQMD Technology Assessment for proposed Rule 1133, March 22, 2002]

Same questions as comments above about moisture.
More through testing on larger windrows should be required.
49
Is there any other tests available?
If SCAQMD changes their tests, will MDAQMD automatically follow?
Since Nursery products will not use greenwaste, how will this effect PH?
Will Nursery Products be allowed to use the fine dust that caused problems in Adelanto?

Since illegal wood waste was already dumped at the Nursery Products site, will more oversight be put on their facility?
More oversight on their bulking material, all bulking material?
What construction materials will/will not be allowed as bulking material?
Is particle wood or painted wood allowed?

(v) Adequately mix incoming Feedstock so that moisture and nutrients are maintained in proper proportions in all parts of the Composting Piles. *[derived from Technical Support Document Little Hanaford* Farms , Southwest Clean Air Agency, pg. 8]

How will this be tested? How often? Will larger piles and windrows be tested and treated differently?
All feedstock should be covered with waterproof material.
If incoming feedstock is dry, how will it be brought to 40% to 70% moisture level?
Why use a small chicken manure composter in Washington State for any conditions or requirements for this new rule? (Hanaford)
Take all reference to Hanaford Farms out of the new rule.
VOCs from greenwaste are not studied enough for this new rule?
How does wind affect VOCs generated on greenwaste?
From the Nursery Products EIR , only 200 tons of "clean soil, sand, gypsum, and sawdust" will be used as a bulking agent every day.
Are these considered feedstock?
Will this be enough to meet all other requirements of the rule when mixed with 2000 wet tons a day?
MDAQMD Staff has said repeatedly that the dust problems in Adelanto were caused by a few loads of fine dust from a "dirt burner" facility close by.
50
Does MDAQMD Staff believe that this was reason for all the dust problems in Adelanto?
Was this dust only used in May 2005?
That was when the Dept of Health Services reported "a great deal of dust was generated during the windrow turning process"
Does this match the MDAQMD Staff statements about the dust problems?
Were there ever any other dust issues in Adelanto?
What caused those additional dust problems?
How far was the dust reported to have traveled?
Does MDAQMD Staff believe the residents of Adelanto were exaggerating the dust problems?
Was there any dangerous materials in the dust from Adelanto or in any composting facility?
How was this tested? Will the new rule test any dust that leaves the site?
The new rule should include a survey of what the area around the co-composting facility dust and dirt consists of and then periodic tests to maintain that the dust and dirt composition has not changed.
Did MDAQMD Staff believe the results of the tests from by DHS in 2005?
Did the MDAQMD Staff believe all the problems with the Dept of Water and Power were true? Why or why not?

(b) Maintain daily records of materials receipt, discharge, and operational activities sufficient to verify the requirements of (C)(3)(a), and on a daily basis, the operator shall record the quantity of materials received that would be used for the Compost or Co-Compost operation.

These materials include, but are not limited to, material that may be recovered from the composting process for re-use in another batch of Compostable Material, Biosolids, Manure, and Greenwaste. *[derived from SJVUAPCD Rule 4565 6.1.4.1]*

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Will public have access to these records?
How often can the public see the records and verify?
Can we get an independent load check and quality of load checks and tests?
What about materials not used in composting process?
What materials can and will be reused in the composting process? Where is list?
Will reused material be weighed and quantified?
Will it count in the total weight allowed to be processed?

(c) If a tested parameter is found to be outside applicable limits specified in section (C)(3)(a)(ii), (C)(3)(a)(iii), or (C)(3)(a)(iv), the Operator shall take remedial action within 24 hours of discovery to bring Pile characteristics within the specified limits. *[derived from SJVUAPCD Rule 4565 5.3.6]*

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How long does the operator get to bring problem back into the proper standards?
Will these problems turn into an issue like the Dog Food plant? Years to fix?
During the fix, will the operator be allowed to continue to accept material?
They should not be allowed any more material until the tested parameter is met.
What fines or penalties will be applied as the time to comply lengthens?
Is it 24 hours from when a LEA agency or when the tests and records show the problem? Another reason the public should have daily access to all records.
Will repeat problems be dealt with same as the first offense?
The penalties and fines should go up exponentially and no more material should be allowed into the project.

(4) Contingency Measure
(a) The requirements of this section only apply if USEPA makes a finding, as evidenced by publication in the Federal Register, that the District (or portion thereof) has been designated as a non-attainment area for the $PM_{2.5}$ National Ambient Air Quality Standard.
(b) Any Composting operation accepting more than 100,000 wet tons of Compostable Material shall be contained within a completely walled, floored, and roofed structure or vessel venting to add-on control technology with a minimum 80 percent (by weight) destruction efficiency for VOC and ammonia. *[derived from MDAQMD Technical Report, H &* S Code §39614 Feasibility Analysis for Composting and Related Operations, Staff Recommendation]

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The contingency measure should be for PM10 because these composting facilities emit PM10.
Why make the contingency for PM2.5 when the Air District is trending down on PM2.5?
This seems like a provision to make the effected population feel that the MDAQMD Staff is looking out for the public good and air quality, even though the MDAQMD Staff knows that the contingency will not be in effect for the foreseeable future. Is this true?
Is this contingency in place in any other Air District in the country? Which ones?
List the rules in place for other Air Districts in the Western States?
List the cost per ton of VOCs that other Air Districts used and explain why the MDAQMD Staff seems much lower than others?

Do the coastal Air Districts accept Sludge from other Counties and/or district?
More reasons the contingency is not already in place as a requirement?
The (4 (b)) portion needs to be required now and for all facilities in the Air District.
Require enclosure and capture of 80% of all emissions from co-composting now.

(D) Monitoring and Records

(1) The operator shall, at a minimum, maintain operations records for a period of at least two years, or five years for facilities subject to Title V permit requirements, and make them available to the APCO upon request. *[Derived from SCAQMD Rule 1133.2(h)]*

If only inspected once a year (minimum), the records need to be kept longer.
Records need to be sent in monthly to be held for review later.
All records need to be digital as to allow rapid verification. No handwritten numbers or letters accepted.

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Records of input, throughout, output, emissions, water use, weather all need to be kept and submitted monthly.
Can the public get a copy of these records?
The public should have access to these records.
Records need to be kept for length that the facility is accepting waste. Any less does not allow tracking of materials in the waste stream that may not be discovered until many years later. Look at PCBs and how they sometimes get into the waste stream.

(E) Compliance Procedures and Test Methods

(1) Measurements of Piles and Windrows shall be determined by collecting at least 10 samples from various locations of the Pile or Windrow at a depth of at least 12 inches below the Pile or Windrow surface.
(2) Samples shall be mixed thoroughly and analyzed for moisture content by ASTM method D4442, ASTM method D4444, or ASTM method E871-82. *[Derived from SCAQMD Rule 1133.1(e)]*
(3) Compost Maturity/Stability Test Methods *[derived from SJVUAPCD Rule 4565 6.2.1]*
(a) TMECC Method 05-08-B (Carbon Dioxide Evolution Rate); or
(b) TMECC Method 05-08 E (Solvita Maturity Test®)
(4) Best Management Practices Test Methods *[derived from SJVUAPCD Rule 4565 6.2.2]*
(a) Oxygen Concentration – TMECC Method 05.08-C (In-Situ Oxygen Refresh Rate)

Piles are permitted to be 1000 ft X 30 ft wide x 12 ft tall. How do all these test methods work on piles so long and tall? Compare to a normal size windrow 15 ft wide x 6 ft tall? More samples at different depths? Windrows tested more depths and bottom for all tests.

55

Who tests the equipment and personnel doing tests? How often are workers qualifications checked? When are calibrations of equipment checked? How often?
What are the penalties and fines?
All tests should be digital for cross checking and verification of standards and calibration?
Does public have access to records? How often, how soon after samples taken?
Are there other tests that are more accurate? What are other tests?
Can the MDAQMD add extra tests if feels necessary?

Can the MDAQMD force the compost facility to have permanent VOC and PM sampling stations upwind and downwind?
Will the MDAQMD require the tests go to a qualified lab like Columbia Analytical Services in Simi Valley?
Can you look at the records for testing at the compost facility in Adelanto and learn from the way that facility was run? Who did the testing in Adelanto?
Can anyone keep track of 100 trucks a day 14 hours a day, 365 days a year, as well as the testing of composting and curing piles?
How will MDAQMD Staff confirm all these tests?
CIWMB has said it will make many more unannounced inspections on the Hinkley facility, can MDAQMD make more unannounced inspections on co-composting the normal procedure?
All co-composting facilities should have testing outside the boundaries of the co-composting facility, of any facility that does not have truck washing and wash water captured as standard practice.
The co-composting area should have a baseline established, before a co-composting facility begins operation or ground breaking. All dirt, water and air quality should be tested and measured to see if any impacts of the co-composting facility are evident.
Require PM and VOC monitors on all sides and inside all co-composting facilities.

(5) Contingency Measure Test Methods
(a) VOC – USEPA Method 18 and USEPA Method 25, or equivalent.
(b) Ammonia – South Coast Air Quality Management District Method 207.1 – Determination of Ammonia Emissions from Stationary Sources, or equivalent.

When is this contingency in effect? Is this as accurate as any of the other tests, more accurate, less accurate? Why the difference between the tests?
Piles are permitted to be 1000 ft x 30 ft wide x 12 ft tall. How do all these test methods work on piles so long and tall? Compare to a normal size windrow 15 ft wide x 6 ft tall? More samples at different depths? Windrows tested more depths and bottom for all tests.
Who tests the equipment and personnel doing tests? How often workers qualifications checked? When are calibrations of equipment checked? How often? Penalties and fines?
56
All tests should be digital for cross checking and verification of standards and calibration?
Does public have access to records? How often, how soon after samples taken?
Are there other tests that are more accurate? What are other tests?
Can the MDAQMD add extra tests if feels necessary?
Can the MDAQMD force the compost facility to have permanent VOC and PM sampling stations upwind and downwind?
Will the MDAQMD require the tests go to a qualified lab like Columbia Analytical Services in Simi Valley?
No self testing. If facility has any violations, then all tests should be done by qualified independent testing authority.

(6) Alternative Compliance Methods
(1) Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with any provisions of this rule may also be used after review and

approval in writing by the APCO and CARB. *[derived from MDAQMD Rule 1165]*

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What are these acceptable test methods? No other test methods should be substituted except the most stringent testing and oversight of test results and compliance to limits, rules and regulations. Who tests the equipment and personnel doing tests? How often workers qualifications checked? When are calibrations of equipment checked? How often? Penalties and fines?
All tests should be digital for cross checking and verification of standards and calibration?
Does public have access to records? How often, how soon after samples taken?
Are there other tests that are more accurate? What are other tests?
Can the MDAQMD add extra tests if feels necessary?

(F) Violations

(1) Failure to comply with any provision of this Rule shall constitute a violation of the Rule.
(2) A violation of the limits contained in this Rule as determined by any one of these test methods shall constitute a violation of this Rule.
(3) When more than one test method or set of test methods are specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

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Can MDAQMD require facilities to stop accepting any material while under any other violation? They should as incentive to not violate.
Any violation should require complete termination of any acceptance of waste, bulking agent, or other throughput. No Sludge should be allowed if any other violations exist.
Fines need to be large and escalating in amounts for multiple offenders.
No substitute tests. Screen all personnel qualified to take tests. Make all data digital to facilitate compliance and oversight.
Does history of applicant have any effect on the oversight or violations? It should.

District response to Public Comment Letter 26

1. The BMPs reduce VOC emissions at much less cost. The amount of these reductions are less than those which would result from enclosure but they are much more effective on a cost per ton of emissions reduced. The District reviewed only the control measures CARB identified on its list produced pursuant to H&S Code §39614. Climate and wind has no bearing on the proposed rule. Violations are violations of the rule regardless of wind or climate conditions at the time.

2. The District has not inventoried chipping and grinding operations – this will be done in response to the proposed rule should it be adopted. The District currently has no rules for chipping and grinding. The current District emissions inventory does not identify emissions from composting operations. The most recent SIP identified District VOC emissions at 50 tons per day within the federal ozone nonattainment area. The District does not currently have any outstanding enforcement actions against chipping and grinding operations. Currently two composting operations are permitted within the District (by other agencies) – California Biomass and NTC Fort Irwin. The District does not currently have any outstanding enforcement actions against these composting operations. Other questions regarding these operations can be answered when the registration portion of the proposed rule is complied with. The District cannot answer for a facility outside the District. The District has used cost numbers from the Rancho Cucamonga facility in this staff report.

3. No, all sizes of agriculture, nursery or other compost or grinding operations are subject to this proposed rule. All co-composting facilities are subject to the rule. All agricultural composting is subject to this rule. All exemptions are clearly listed in section (A)(3). Portable equipment is not portable after 364 days, and would not be exempt at that point.

4. The District cannot answer this question until the registration portion of the proposed rule is complied with. The District will enforce all portions of the proposed rule. Enforcement is performed in accordance with District rules and state law – penalties are levied in relation to the nature of the violation. Please see H&S §§42400 et. seq for the penalty provisions of state law.

5. The District will enforce the rule. Enforcement of a violation does take past history into account. 22 consecutive days without regard to weather. The commenter is encouraged to consult publicly available weather databases to find the desired data. Any of the conditions ends the active definition, so measurements are not required. Weather does not effect the active compost definition.

6. That seems unlikely in the arid high desert.

7. The District has one APCO (or Executive Officer) with approximately 40 staff. The District believes the current eight person compliance/enforcement staffing is adequate to meet all current and foreseeable needs. Total staffing costs (including training and hiring) are estimated at $100,000 per year per person.

8. A commercial operation in a backyard would not meet the definition, aside from that there is no size aspect to it.

9. The Hanaford Farms document was cited by SJVAPCD as support for their rule. The State of California has determined that the San Joaquin rule is potentially applicable to the District – but the applicability test was feasibility, not climate. The commenter is encouraged to contact the agencies with jurisdiction over the Hanaford Farms facility to obtain further information. With regard to specific conditions, the District has identified a list of control measures and presented them in the Best Management Practices portion of the proposed rule.

10. Biosolid conditions, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the health and solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information.

11. Waste handling conditions, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information. The District will be requiring compliance with the administrative and BMP sections of the rule.

12. The District will not be enforcing another agency's permit, and will not have another agency enforce a District permit. The District investigated Nursery Products Adelanto, however could only enforce the rules in place in the District rule book at that time. The District always strives for constant improvement in its enforcement activities and rates its performance as meeting or exceeding requirements.

13. A definition of food waste is included in the proposed rule. Waste handling conditions, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information. The District has no information regarding bark beetles, but the commenter is encouraged to contact the San Bernardino National Forest for more information on that pest.

14. The definition is adequate for the proposed rule. Testing requirements are specified in the proposed rule.

15. Organic is defined as containing carbon. Waste handling conditions, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information.

16. Waste handling conditions, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information. The State of California or the commenter's local state representative may be able to provide information on future legislative actions.

17. The District will have the requested information as a result of the proposed rule's administrative requirements. The CIWMB will be contacted to obtain an initial contact list to begin this process upon rule adoption. The proposed Hinkley facility includes co-composting as far as the District can determine.

18. Waste handling conditions, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information.

19. Facilities subject to the rule requirement will test and record the results in accordance with the proposed rule. South Coast and San Joaquin actions will have no direct impact on the proposed rule, but the State of California could at some future date require rule revisions. Pile dimensions have no bearing on the proposed rule.

20. The District has no ability to regulate the flow of emissions into the District. H&S Code §40912 assigns the responsibility for such transport of pollutants is the responsibility of the upwind air district. The District only has enforcement authority within its own defined boundaries. Historically the District holds workshops at the District office. In the case of the proposed rule, workshops were requested at other locations and the District provided them. The District Governing Board represents the entire MDAQMD. Please see H&S Code §41220 regarding the composition of the District's Governing Board.

21. No, dust from access roads is not considered by the air district in facility emissions for the composting source category. The land use agency can consider such matters but the district can not in most situations. The location of a given activity has no bearing on the proposed rule (so long as it occurs within the District). The District has no information on the edibility of any material, but the commenter is encouraged to contact the health and waste agencies for further information. The District has no information on the expansion of any entity. The District inspects every permitted facility at least once per year. Historical enforcement at any specific facility has no bearing on the proposed rule – please submit a public information request for public information on any facility. The District permitted an engine and tub grinder at Nursery Products Adelanto.

22. The District is not limiting throughput of any material in the proposed rule. Sludge and greenwaste are compostable. The emission factors used for the proposed rule are presented in the cost-effectiveness section. Climate has no bearing on the BMPs in the proposed rule. Waste handling conditions, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information. Some elements of test reports may be confidential. Testing and recordkeeping requirements are specified in the proposed rule. Penalties and fines are assessed by the APCO in accordance with State law, and they are not rule-specific. Please see H&S Code §§42400 et. seq for specific penalty provisions sections.

23. An off-site nuisance is a rule violation. Tests are performed and recorded by the operator as required by the proposed rule, and reviewed and verified by the District. Pile size has no bearing on the proposed rule. Waste handling conditions, availability, delivery to site, permitting of use

of said material on any given site and records used to verify are the responsibility of the solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information. There is no 25 ton per year VOC limit on storage piles. Commenter appears to be confusing Regulation XIII offset thresholds with emissions limitations.

24. The District is not limiting throughput of any material in the proposed rule. As the emission factors are on a per wet ton of throughput basis, increased throughput means increased emissions. The District has no emissions limit in the proposed rule. Wind has no bearing on the proposed rule. Any nuisance will result in an enforcement action. The District has no information on the paving of roads into any given location – the commenter is encouraged to contact the County of San Bernardino for more information.

25. Waste handling conditions, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information. Grass clippings would be considered greenwaste under the proposed rule.

26. The District will not be enforcing another agency's permit, and will not have another agency enforce a District permit. The District is unable to comment on another agency's performance. The policy of the District is to refer issues within the jurisdiction of other agencies to the specific agency. The District also takes referrals from other agencies regarding potential violations of District rules.

27. Waste handling conditions, content, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the health and solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information. Manure is a compostable material under the proposed rule. Any nuisance will result in an enforcement action.

28. There are no throughput limits on materials in the proposed rule. There are no emission limits in the proposed rule. Wind has no bearing on the proposed rule.

29. The owner and operator are responsible for operations on their facility under the proposed rule (and District rules in general).

30. The District cannot predict what equipment any given facility will have, but enforces all applicable rule and regulations on all facilities. The District is informed by the owner/operator about its equipment by the submission of a permit application. Unpermitted equipment, if any, is usually discovered upon inspection of the facility.

31. There are no size or location limits in the proposed rule. Size of a windrow and/or wind has no bearing on the proposed rule.

32. The District maintains several meteorological monitoring stations (including in Barstow and Victorville) - there are other meteorological monitoring stations within the District maintained by a plethora of agencies and individuals. Rain allows a delay in chipping and grinding timelines

under the proposed rule. There are no cease of operation requirements in the proposed rule. Exceeding the maximum moisture content on compost would be a rule violation. One of the BMPs in the proposed rule requires windrow covering. Water runoff is not within the jurisdiction of the District – flood control or the water quality control board may have jurisdiction. Any nuisance will result in an enforcement action.

33. The District has no information on other tests. No, rule making is an air district specific activity and changes in one air district do not carry over to another. No, most testing methods have been developed by USEPA, CARB and SCAQMD. The operator will perform test, as required by the proposed rule. The District qualifies testing equipment and testing companies. The testing entity will test equipment. The District verifies the testing. No, the compliance history of an owner/operator does not influence testing. No, windrow size does not change testing or test procedures. No, SCAQMD does not specify windrow size for testing. No, test results should be consistent regardless of windrow size.

34. Recordkeeping of throughput is required by the proposed rule. Emissions are not being limited by the proposed rule.

35. A tipping fee is not required by the proposed rule.

36. The District has no information on other tests. Please see responses to question 33 above..

37. See below. The District cannot change the Federal definition. Typically a control device is required to demonstrate compliance with an annual source test, and the test is required by permit condition to comply with the appropriate Federal Reference Method. VOC is defined in 40 CFR 51.100(s) as follows:

> (s) Volatile organic compounds (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.
>
> (1) This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity: methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC113); trichlorofluoromethane (CFC11); dichlorodifluoromethane (CFC12); chlorodifluoromethane (HCFC22); trifluoromethane (HFC23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC114); chloropentafluoroethane (CFC115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC123); 1,1,1,2-tetrafluoroethane (HFC134a); 1,1-dichloro 1-fluoroethane (HCFC141b); 1-chloro 1,1-difluoroethane (HCFC142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC124); pentafluoroethane (HFC125); 1,1,2,2-tetrafluoroethane (HFC134); 1,1,1-trifluoroethane (HFC143a); 1,1-difluoroethane (HFC152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene); 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 4310mee); difluoromethane (HFC32); ethylfluoride (HFC161); 1,1,1,3,3,3-hexafluoropropane (HFC236fa); 1,1,2,2,3-pentafluoropropane (HFC245ca); 1,1,2,3,3-pentafluoropropane

(HFC245ea); 1,1,1,2,3-pentafluoropropane (HFC245eb); 1,1,1,3,3-pentafluoropropane (HFC245fa); 1,1,1,2,3,3-hexafluoropropane (HFC236ea); 1,1,1,3,3-pentafluorobutane (HFC365mfc); chlorofluoromethane (HCFC31); 1 chloro-1-fluoroethane (HCFC151a); 1,2-dichloro-1,1,2-trifluoroethane (HCFC123a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C4F9OCH3 or HFE7100); 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OCH3); 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C4F9OC2H5 or HFE7200); 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF3)2CFCF2OC2H5); methyl acetate, 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C3F7OCH3, HFE7000), 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE7500), 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea), and methyl formate (HCOOCH3), and perfluorocarbon compounds which fall into these classes: (i) Cyclic, branched, or linear, completely fluorinated alkanes; (ii) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; (iii) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and (iv) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Since this definition is standardized and well known, the District defines this term by reference in all of its rules to avoid excess verbiage in its rules.

38. Wet weather only extends the chipping and grinding timelines in the proposed rule – weather has no other bearing on the proposed rule. Compost is required to be covered by the proposed rule. Pathogens in waste are the responsibility of the health and solid waste agencies – the commenter is encouraged to contact the appropriate agencies for further information.

39. Only wood meets the definition of woodwaste in the proposed rule. The California vehicle code currently requires cover or minimum freeboard in haul trucks. Waste handling conditions, content, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the health and solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information. There is no wind limitation in the proposed rule. Any nuisance will result in an enforcement action. Asbestos is not woodwaste. Recordkeeping on feedstock is required by the proposed rule. Some elements of required records may be confidential. The District maintains no records on any potential fugitive dust.

40. Some elements of required records may be confidential. The owner/operators are responsible for their own employee counts. The proposed rule includes no regulation for trucking and truck drivers. An owner/operator is responsible for activities within their facility. There is no clean-up provision in the proposed rule beyond the co-composting housekeeping requirement, which is the responsibility of the operator to perform and keep records of.

41. The District will require compliance with the letter of the recordkeeping provision. The proposed rule has no truck cleaning requirement.

42. Please see answer 43 below.

43. The District will enforce compliance with the proposed rule, to the extent required by the rule. The proposed rule does not include emissions limits. The specific limits are in the control measure identified by the State of California for analysis by the District. The proposed rule includes all cost-effective requirements identified for the District. The processing timelines are on a load as delivered to site basis. There are no weight limits.

44. Records can be digital. Waste handling conditions, content, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the health and solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information.

45. BACT is an element of New Source Review. The proposed rule is a source specific rule – BACT has no bearing on the proposed rule. There are no quantifiable direct PM emissions associated with composting (there are quantifiable PM precursor emissions, specifically VOC and ammonia). Nursery Products Adelanto would be subject to the proposed rule if it were still operating. The District will enforce the proposed rule, with at least annual inspections. Enforcement action details depend upon the specific alleged violation.

46. Housekeeping is required to eliminate larger than one inch material, if no such material is present, housekeeping is not required (such as on a non-operating day). Where compostable material (including compost) is mixed, screened and stored. The District will enforce the proposed rule.

47. The proposed rule includes adequate testing and recordkeeping requirements. Failure to test and maintain records would be considered a rule violation.

48. An operator must immediately take action to correct a rule violation. Finished compost requirements were not an element of the control measures the State of California directed the District to evaluate.

49. An operator must immediately take action to correct a rule violation. Finished compost requirements were not an element of the control measures the State of California directed the District to evaluate. The proposed rule testing and recordkeeping for pH is adequate. The District will revise the proposed rule if directed to do so by the State of California. The pH requirement only applies to co-composting. The proposed rule does not prohibit dust as a bulking agent. Waste handling conditions, content, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information.

50. Testing and results recordkeeping requirements are specified in the proposed rule. Hanaford Farms was referenced by San Joaquin in support of their composting rule. The proposed rule has no reference to Hanaford Farms. Greenwaste composting is regulated by the proposed rule. Wind has no bearing on the proposed rule. Bulking agents are considered feedstock by the proposed rule. The District is unable to predict how any facility will comply with the proposed rule. The District is unable to identify the source of all dust problems in any community, and has

no operational data for any composting operation to date (there is no rule requiring such data at this time). A great deal of dust could trigger a nuisance complaint, and subsequent enforcement action by the District. Historical dust investigations have no bearing on the proposed rule. Any dust could be considered a rule violation (the District has nuisance and dust rules), but the proposed rule does not have any direct dust provisions. The District is unable to comment on actions or motivations of other entities.

51. Some elements of recordkeeping required by the proposed rule may not be confidential. Publicly available records are available through the public information act. There are no load check requirements in the proposed rule. Details of any specific composting operation depend upon that operation – the recordkeeping provision of the proposed rule is adequate to cover all possibilities. There is no weight limit in the proposed rule.

52. A rule violation must be corrected immediately. Further details on the nature of an enforcement action, penalties, corrective actions and timelines are dependent upon the specific enforcement action and the violation alleged.

53. Composting facilities are not contributing to the current District PM_{10} problems. Composting facilities may contribute to potential future $PM_{2.5}$ problems, just as they are in South Coast and San Joaquin. To the District's knowledge, a similar contingency measure is not in place in any other air district (however the District has precedent for contingency measures in Rule 403.1 and 403.2). Other air district and entity air quality rules are available from those entities – the commenter is encouraged to obtain the desired information directly from those other entities. Other air district composting cost-effectiveness data (as collated by the State of California) is presented below. The District cost-effectiveness analysis has been revised and is presented in this staff report. The health and solid waste agencies may be able to address sludge origins and destinations – the District does not have this information. Enclosure has been shown to not be cost-effective.

Reported Cost-Effectiveness Numbers for Air District Measures

No.	Category	District	Rule #	Title	Date*	Date Notes	C.E. Notes	C.E. ($/ton reduced)
54	Composting and Related Operations	SCAQMD	1133	General Administrative Requirements	1/10/03	Adopted	(VOC and NH3 combined)	$8,700 to $10,000
55	Composting and Related Operations	SCAQMD	1133.1	Chipping and Grinding Operations	1/10/03	Adopted		
56	Composting and Related Operations	SCAQMD	1133.2	Composting	1/10/03	Adopted		
57	Storage, Transfer, and Dispensing Operations	BAAQMD	8.7	Gasoline Transfer and Dispensing Facilities	11/6/02	Amended	(VOC) Requires testing to ensure compliance w/ARB's vapor recovery program	Not applicable
58 a	Storage, Transfer, and Dispensing Operations	BAAQMD	8.5	Organic Liquid Storage	11/27/02	Amended	(VOC) • 2002: Increase monitoring of seals and filters on floating roof tanks • 1999: Requirements for slotted guidepoles and seals on internal roof tanks • 1993: Requirements for other equipment	• $11,600 (2002$) • $1,250 • $13,000 to $15,700
58 b	Storage, Transfer, and Dispensing Operations	SCAQMD	463	Organic Liquid Storage	3/11/94	Amended	(VOC)	Data pending
58 b	Storage, Transfer, and Dispensing Operations	SCAQMD	1149	Storage Tank Degassing	7/14/95	Amended	(VOC)	Data pending

D-11

*Date when rule was adopted or last amended.

54. Record retention has been extended to five years for all sources. Current recordkeeping requirements are adequate to demonstrate with the proposed rule. Some records required by the proposed rule may not be confidential. Waste handling conditions, content, availability, delivery to site, permitting of use of said material on any given site and records used to verify are the responsibility of the health and solid waste agencies – the commenter is encouraged to contact the appropriate agencies for information.

55. The proposed rule testing requirements are adequate for mixed bulk materials. The District will review test results and testing methods as part of periodic facility review. The proposed testing methods are consistent with the control measures the District was directed to review by the State of California. Some records required by the proposed rule may not be confidential. The District has the authority to require additional tests and can require source specific monitoring. Many of the required tests must be performed by an independent third party. The District has never had any composting testing requirements previously. There is no truck tracking requirement in the proposed rule. The District does make unannounced inspections. Soil and water testing would be the responsibility of solid waste, health and water agencies – the commenter is encouraged to contact the appropriate agencies for information.

56. The contingency measure has been revised for clarity. The VOC test is a capture and control test, very different from the compost and feedstock tests, and would be regulated by District permit condition (the District requires a permit for any air pollution control device). Bringing a large windrow into compliance with the contingency measure would be an interesting engineering challenge. The District has authority over the test method, test session and test results, as with any source test. Most source test report elements are not confidential, and some are reported digitally. Current District policy requires the submission of a physical report. The District has the authority to require additional tests and can require source specific monitoring. Many of the required tests must be performed by an independent third party.

57. The District cannot comment on alternative tests until such tests are proposed, but it is District policy to only accept alternatives that are demonstrably equivalent to or superior to a given test requirement. The District has authority over the test method, test session and test results, as with any source test. Most source test report elements are not confidential, and some are reported digitally. Current District policy requires the submission of a physical report. The District has the authority to require additional tests and can require source specific monitoring. Many of the required tests must be performed by an independent third party.

58. A cease and desist order is the ultimate enforcement action. Enforcement action details depend upon the specific enforcement action.

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Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 12:43 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 1
Attachments: list of reasons.doc; ATT546285.htm; 25 Feb 2008 MDAQMD.doc; ATT546286.htm; 1133 preliminary draft d1.pdf; ATT546287.htm; 071001 Table of Contents.pdf; ATT546288.htm; 071014 MDAQMD Board letter.pdf; ATT546289.htm

Tracy
Please add these to the official record on the composting rule now being written.

thanks

norman

D. Norman Diaz
25789 Community Blvd
Barstow, CA 92311

760 963-3585

9/9/2008

District response to Public Electronic Mail 27 #1 (5 attachments)

Attachment 1: List of Reasons why proposed Rule 1133 is bad for the Mojave Desert Air District

Why Proposed Rule 1133 is Bad for the Mojave Desert Air District

1) The rule is not protective of human health because it does not require **any** control technology.

2) The rule encourages "open air" composting operations to locate in the Mojave Air District.

3) The rule is not effective at reducing air emissions (less than 10% efficiency, as opposed to 80% efficiency for control technologies used by other air districts).

4) The rule does not reduce other heath risks associated with open air composting such as migration of heavy metals and pathogens off-site.

5) The rule is not consistent with Clean Air Act BACT requirements.

6) The rule does not encourage compost operations to adopt rapidly improving technologies for composting operations, such as those required by adjacent air districts.

7) The rule is unfair to compost operations in San Bernardino County and surrounding counties who are currently complying with BACT requirements.

8) The rule paves the way for California's largest sludge compost operation to locate near Hinkley, in prime desert tortoise habitat.

9) The rule allows polluters to pass off pollution costs to the public, while costing them virtually nothing.

10) The rule ignores the fact that requiring enclosure or other pollution filters is extremely cost efficient if costs are passed on to consumers who contribute to the waste stream, ($0.004 per month per household.)

11) The rule requires enclosure only if Air District becomes nonattainment for PM2.5, even though composting operations emit primarily PM10 (for which the District already is in nonattainment.)

Response to Attachment 1: List of Reasons why proposed Rule 1133 is bad for the Mojave Desert Air District

1. Proper rule writing for air pollution only rarely specifies a technology. In general, air pollution control rules set forth emissions levels or practices. The specific technologies used to meet the emission levels are up to the regulated industry. Any technology which can be proven to meet the specified emission level is allowable. This encourages the development of new and potentially better technologies.
2. Encouragement or discouragement of the locations of particular operations is the responsibility of the local land use agency. Enactment of the rule will not impact this one way or the other. Composting operations may be located in the MDAQMD regardless of whether this rule is enacted or not.
3. The power to regulate industry is directly dependant upon the severity of the air pollution problem in a particular area. Rules in other areas, notably San Joaquin and South Coast are a direct result of the severity of the air pollution problems in those areas.
4. This rule is meant only to satisfy the requirements of Health & Safety Code § 39614. These issues are primarily dealt with by other agencies. The only applicable air district program in regards to heavy metals is the "Air Toxics Hot Spots" program. This program is a reporting risk analysis program which is implemented only after a facility has become operational. Existing composting facilities within the District are subject to its provisions and any new facilities would also be subject.
5. The MDAQMD is not required to create BACT level rules due to the relatively good air quality. BACT is imposed via New Source Review (NSR) on facilities which qualify. Commenter is confusing BACT pursuant to NSR with BACT level rules which are necessary to comply with particular nonattainment area planning requirements.
6. Innovative technologies are encouraged by adopting rules with "emission levels" rather than specific technologies. See response #1 above.
7. Proposed Rule 1133 applies to both existing and proposed facilities.
8. Particular composting operations may locate in the MDAQMD regardless of the existence of the rule. The District has no authority over endangered species protection/degradation caused by a specific project. This is addressed by the local land use agency.
9. This proposed rule does not directly impose costs on anyone, public or private.
10. Cost-effectiveness was determined in a prior report. Cost-effectiveness has been re-analyzed in this Staff Report.
11. Enclosure is primarily an ammonia and VOC control measure. Ammonia and VOCs are precursors to $PM_{2.5}$. Best Management Practices are PM_{10} control

Attachment 2: Titled "25 Feb 2008 MDAQMD"

Response to Attachment 2: The District appreciates the submission of this information. This attachment has been added to the official record of Rule 1133 as requested.

Attachment 3: Preliminary draft d1, 06/05/2008 Rule 1133 – *Composting and Related Operations*

Response to Attachment 3: The District appreciates the submission of the preliminary draft rule. This attachment has been added to the official record of Rule 1133 as requested.

Attachment 4: Table of Contents (60 sources listed)

Response to Attachment 4: This document and all supporting literature was previously submitted on October 1, 2007 and reviewed by District staff prior to preparation of the Technical Discussion. All documents remain on file. This attachment has been added to the official record of Rule 1133 as requested.

Attachment 5: Letter to the MDAQMD Board Members, 10/15/2007

Response to Attachment 5: The District appreciates the submission of this letter. This attachment has been added to the official record of Rule 1133 as requested.

The District appreciates the submission of the information in these attachments. These attachments have been added to the official record of Rule 1133 as requested

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 1:03 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 2
Attachments: 060915 SB Sun sludge 2 cheap and clean diesel.pdf; ATT546141.htm; 061102 liberty V Refinery may slash sludge emiss.pdf; ATT546142.htm; 061105 Bakersfielp comp-fuel.pdf; ATT546143.htm; 061212 Colton enclosed.doc; ATT546144.htm; 061219 colton plant.pdf; ATT546145.htm; 061222 EPA approves city's plan to bury sludge LA Times.pdf; ATT546146.htm; 070213 niland sludge issue.pdf; ATT546147.htm; 070412 rialto sludge plant.pdf; ATT546148.htm; 070508 Rialto sewage plant.pdf; ATT546149.htm; 070508 Used kitchen grease will power Rialto's sewage treatmen; ATT546150.htm; 070510 rialto fuel cell.pdf; ATT546151.htm; 070511 Rialto Chevron fuel cell.pdf; ATT546152.htm; 070516 ireland opens enclosed.pdf; ATT546153.htm; 070713 manure Digester curbs water pollution.pdf; ATT546154.htm; 070802 UK sludge to power.pdf; ATT546155.htm; 071011 sludge to energy.pdf; ATT546156.htm; 071012 Banning CA sludge to power.pdf; ATT546157.htm; 071030 TN sludge to biodiesel.pdf; ATT546158.htm; 071031 sludge to biodiesel.pdf; ATT546159.htm; 071206 SB Sun bucket.pdf; ATT546160.htm; 071211 slude to power.pdf; ATT546161.htm; 071211 UAE sludge burner.pdf; ATT546162.htm; 071212 Ohio sludge to power.pdf; ATT546163.htm; 071212 sludge to bricks.pdf; ATT546164.htm; 071213 india sludge bricks.pdf; ATT546165.htm; 071213 India sludge to bricks.pdf; ATT546166.htm; 071213 Iowa sludge to power.pdf; ATT546167.htm; 071213 Ohio power.pdf; ATT546168.htm; 071213Akron Ohio - end of sludge compost - starting power from sludge.rtf; ATT546169.htm; 071214 slludge to gas.pdf; ATT546170.htm; 071221 lost hills liberty.pdf; ATT546171.htm; 071227 NY sludge powered plant.pdf; ATT546172.htm; 080105 AU sludge plant $1.5 bil.pdf; ATT546173.htm; 080108 cospost heat.pdf; ATT546174.htm; 080108 rialto fuel cell.pdf; ATT546175.htm; 080108 rialto sludge to fuel.pdf; ATT546176.htm; 080110 IL sludge to roadbase.pdf; ATT546177.htm; 080110 sludge to fuel pellet.pdf; ATT546178.htm; 080115 banning power from sludge.pdf; ATT546179.htm; 080115 FL sludge to power.pdf; ATT546180.htm; 080116 banning liberty plant.pdf; ATT546181.htm; 080127 biodiesel from algae.pdf; ATT546182.htm; 080130 landfill to electcity.pdf; ATT546183.htm; 080203 Iowa wastewater.pdf; ATT546184.htm; 080222 asia gasifacation.pdf; ATT546185.htm; 080225 Canada liberty.pdf; ATT546186.htm; 080225 Sac waste to fuel.pdf; ATT546187.htm; 080226 boston compost power.pdf; ATT546188.htm; 080226 boston compost to power.pdf; ATT546189.htm; 080229 Canada liberty issues.pdf; ATT546190.htm; 080304 NY sludge to methane.pdf; ATT546191.htm; 080312 UK sludge compost alt.pdf; ATT546192.htm; 080324 china sludge waste plant.pdf; ATT546193.htm; 080328 FL sludge to power.pdf; ATT546194.htm; 080411 OH sludge to power.pdf; ATT546195.htm; 080600 Wright Tech sludge to power.pdf; ATT546196.htm; 080608 NY sludge to power-heat.pdf; ATT546197.htm; 080613 glass beads from sludge.pdf; ATT546198.htm; 080619 NZ sludge to fuel.pdf; ATT546199.htm; 080706 Banning plan.pdf; ATT546200.htm; 080706 Banning sludge 2 power.pdf; ATT546201.htm; 080707 Banning no opposition.pdf; ATT546202.htm; 080707 efuel.pdf; ATT546203.htm; 080709 NY sue syagro.pdf; ATT546204.htm; 080710 ladonna let 2 ed.pdf; ATT546205.htm; 080901 Rialto fuel cell from 6 waterplants.pdf; ATT546206.htm; alternatives.pdf; ATT546207.htm

All these alternatives should be considered as cost effective and feasible.

D. Norman Diaz
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Barstow, CA 92311

760 963-3585

9/9/2008

The MDAQMD does not dictate to businesses what they are to do with sewage sludge. The District primarily regulates air emissions from operational facilities and cannot go beyond state and federal mandates as set forth in the State Clean Air Act and the Federal Clean Air Act. In general, air pollution control rules set forth emissions levels or practices. The specific technologies used to meet the emission levels are up to the regulated industry. Any technology which can be proven to meet the specified emission level is allowable. This encourages the development of new and potentially better technologies.

The cost-effectiveness analysis prepared is meant to satisfy the requirements of Health & Safety Code § 39614, using the technologies presented in the CARB document *Proposed List of Measures to Reduce Particulate Matter – PM10 and PM2.5*. The articles presented in the attachments of this email do not contain sufficient information to use for a cost-effectiveness analysis. In addition, much of the data presented would not be usable due to different basis, regulations, or the inability to attain information from the country of the project.

Response to Attachments 1-64:

Attachments 1, 6 and 40: Present sludge to bio-diesel technology.

Response to Attachment 1, 6 and 40: Rule 1133 is not a bio-diesel generation rule. This specific technology could be proposed by a facility and then be regulated by an applicable MDAQMD rule(s).

Attachments 2-4, 7, 15, 20, 29, 37, 39, 44, 48, 55 and 57-60: Present the usage of sludge to generate electrical power.

Response to Attachments 2-4, 7, 15, 20, 29, 37, 39, 44, 48, 55 and 57-60: Rule 1133 is not a power generating rule. This specific technology could be proposed by a facility and then be regulated by an applicable MDAQMD rule(s).

***Attachments 5 and* 6**: Present the injection of sludge into an injection well below Terminal Island into a depleted oil field.

***Response to Attachments 5 and* 6**: This technology is not feasible in the MDAQMD since there are not depleted oil fields in the District.

Attachments 8-11, 21, 25-28, 33, 34, 41, 42, 46, 47, 49, 53, 61 and 64: Present the conversion of sludge to methane and bio-gas for power generation.

Response to Attachments 8-11, 21, 25-28, 33, 34, 41, 42, 46, 47, 49, 53, 61 and 64: Rule 1133 is not a power generating rule. This specific technology could be proposed by a facility and then be regulated by an applicable MDAQMD rule(s).

Attachments 12 and 54: Present enclosed composting systems with unspecified control technologies.

Response to Attachments 12 and 54: The District appreciates the submission of this information, but it is not usable in this analysis.

***Attachments 13, 4, and* 52:** Present the usage of cow manure to produce methane, the usage of paper sludge to produce ethanol, and the usage of sludge to produce carbon monoxide (CO) and hydrogen (H), respectively.

***Response to Attachments 13, 4, and* 52:** Rule 1133 is not a methane, ethanol, or CO and H generation rule. Theses specific technologies could be proposed by a facility and then be regulated by an applicable MDAQMD rule(s).

***Attachment 22-24*:** Present the conversion of industrial sludge to bricks for construction, bio-gas, and fertilizer.

***Response to Attachment 22-24*:** Rule 1133 does not address the conversion of sludge to bricks or bio-gas. Rule 1133 does apply to the use of biosolids to compost, but the specific technology in these attachments do not present usable information for inclusion in this analysis. This specific technology could be proposed by a facility and then be regulated by an applicable MDAQMD rule(s).

***Attachment 38 and 45*:** Present the usage of plasma arc technology to convert sludge to natural gas and liquid fertilizer.

***Response to Attachment 38 and 45*:** Rule 1133 does not address the conversion of sludge to natural gas and liquid fertilizer. This specific technology could be proposed by a facility and then be regulated by an applicable MDAQMD rule(s).

***Attachments 18, 63 and* 65:** Newspaper articles that express opposition to a proposed co-composting project in Hinkley.

***Response to Attachments 18, 63 and* 65:** The District appreciates the submission of this information.

Attachments 19, 30, 31, 32, 35, 36, 43, 50, 51, 56 and 62: Informational only and either contain insufficient information or are irrelevant for use in the development of Rule 1133.

Response to Attachments 19, 30, 31, 32, 35, 36, 43, 50, 51, 56 and 62: The District appreciates the submission of this information.

Attachment 65:

Dear MDAQMD Board Members and Staff
In my opinion,
Please consider the alternatives and the steps taken by other compost and Sludge operators. Compare those to Nursery Products operations, their process, their history and their non-compliance with conditions they agree to. I understand that this Board cannot require the applicant to be a good operator or a good neighbor. But this Board has the obligation to error on the side of the public and the long-term health of the community. Look at the odor studies and remediation plans by other responsible composters. I have attached some documents to show how the United States is using its technology to try and reduce the potential risks and dangers of open-air composting.

The applicant sites Austin as a good example of their operation. But it is much different. They take in 3 to 5 times as much green waste as sludge for a better final product. Nursery Products will not do this because they make more money hauling sludge, not making a finished product in my opinion. Ask them why they do not make compost that can be used around people? Why not make compost to be used on crops that people eat? Why are they in such a hurry to haul in sludge, but trying to delay as much as possible hauling out the finished product? Do not allow them to store finished agriculture grade compost for more than 7 days. Doesn't California law state that if Sludge compost is stored for more than 6 months, it is then considered solid waste? Is this part of their permit? Is this safe? How will they keep it from blowing?

The applicant says they are like Lost Hills which is closer to people and larger. What is different about Lost Hills operations and Nursery Products operations in Adelanto? Does Lost Hills have the complaints and lawsuits of Nursery Products operations in Adelanto? Does Lost Hills take in grass? Yes.

Here is quote from the attached article:

"Pat McCarthy of San Joaquin Composting -- who said his family's compost operation outside Lost Hills has been called the largest in the country -- described a planned $200 million renewable energy Project that would zap emissions to miraculously low levels. Liberty V (that's a Roman "five") is in the early permitting stage, McCarthy said. The refinery could turn 786,000 wet tons of sludge a year into 150 megawatts of electricity, reducing certain air-harming emissions from 1,218 tons annually to fewer than 30, he said. Feedlot operator Daniel Rudnick, meanwhile, sang praises of the federal National Renewable Energy Laboratory while condemning current sludge-handling methods as antique practice."

Do not let Nursery Products say they are like Lost Hills. Lost Hills is going to end its open-air operations and make energy. There are profits to be made, even with

the $200 million cost. Why does Nursery Products say it cannot make a profit if it has to cover the operation? Many facilities are going this route, as this Board knows. With all the planned enclosed facilities in Southern California, do we need another pile of waste in the desert? Most communities facing such a dump would fight to send it to someone else (see NIMBY). But we understand that this is a problem of a growing and thriving society. The people on Hinkley and Barstow have agreed that if a qualified applicant would build a safe enclosed facility, then we will consider the project. But to say, we should be responsible for the waste and the effects of the waste of millions of people in our area of 30,000 people is unfair. We deserve the safeguards that the communities that produce the waste would require if their waste were to be dealt with near them.

Nursery Products does some funny math to show you why the emissions would be less if allowed to operate an open-air dump in Hinkley. They base all the numbers on the Sludge being from Barstow and traveling to Kern County and back to Barstow. As stated in other documents, Barstow produces less than 100 tons a year. The EIR states that the average sludge load would travel 200 miles to get to us round trip. That 200 miles can just as easily be spent traveling to Arizona or Kern as Hinkley. Is San Diego closer to Arizona or Hinkley? Anywhere in Riverside County is closer to Arizona than to Hinkley. In reality, since Kern County starts at Edwards Air Force Base, Victorville is closer to Kern than Hinkley as is Adelanto. All of the populated areas of San Bernardino are as close or closer to Kern County as they are to Hinkley. So much for saving truck emissions. Nursery Products says the air quality damage will be over the limits set by our Air District even if they enclose the facility. Look at the attached data from Niland, Lost Hills and especially the Redlands air studies. The Hinkley facility will produce 357 tons of VOCs per year without enclosure. Our Air District limit is 25 tons a year. If Nursery Products is required to capture 80% of the VOCs like they would in the San Joaquin Air District, then Hinkley would consider the project. 80% captured is better than the full 100% blowing towards Hinkley. Nursery Products refuses to even consider it due to profit margins and return on investment issues in my opinion. Are the air quality, health and safety of our population that easy to dismiss? Will the CIWMB allow the profit of an outside company to dictate the safety measures required? All these enclosed facilities are being planned in Southern California:

1. Rancho Cucamonga
2. Redlands
3. Colton
4. Rialto
5. Lost Hills
6. Niland

Why are we stuck with a questionable operator and no safety precautions in Hinkley. Is the need really there? San Joaquin and Kern County are trying to

protect their communities and health. Representatives from state and regional air and water agencies have adopted Rule 4565, which aims to slash some 80 percent of certain emissions from sludge composting and land application operations.

Colton will operate its new enclosed facility at no cost to the city and sell the power generated back to the city to make money. This facility can process 1800 tons a day and reduce odors as well.

Rialto will use sludge to power a fuel sell and save $800,000 for the city and less trucking miles than bringing it to Hinkley.

Niland will make electricity out of Sludge.

Rancho Cucamonga and Redlands will make a commercial grade compost. They will capture all dust and gases. The environment is controllable unlike the great extremes of the desert with wind, sun, cold and rain all factors which will effect the facility of Nursery Products in Hinkley.

Please consider the future of Hinkley and do not allow any more open-air compost sites to be approved. With more enclosed facilities being built, cost will come down, less will go to landfills, less will go to existing open-air Sludge dumps and slowly we can move forward as a society. Will you look your grandchildren in the eye and be proud that you were part of the movement to continue the dirty and dangerous practice of open-air sludge facilities? We need to do better for our future generations.

Deny this open-air dumping practice until all applicants come back with a plan to do it safe using technology that is available. Nursery Products has shown that they cannot even safely operate a small Sludge facility in my opinion.

Thank you

Norman Diaz

***Response to Attachment 65*:**

The proposed rule applies to all existing and any new composting facilities. The specific comments regarding a land use decision on an individual comment have no bearing on the proposed rule. The District did evaluate an existing enclosed composting facility for cost-effectiveness, and the analysis is presented in this staff report.

The District appreciates the submission of the information in these attachments. These attachments have been added to the official record of Rule 1133 as requested.

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Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 1:06 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 3
Attachments: ARB 2nd001.jpg; ATT546043.htm; ARB 2nd002.jpg; ATT546044.htm; ARB reponse001.jpg; ATT546045.htm; ARB reponse002.jpg; ATT546046.htm; CARB_letter-1.pdf; ATT546047.htm; CARB_letter.pdf; ATT546048.htm; co-composting rules.pdf; ATT546049.htm; EPA response001.jpg; ATT546050.htm; EPW PressRelease April10.doc; ATT546051.htm; GHG reporting001.jpg; ATT546052.htm; IWMB melva transcript.pdf; ATT546053.htm; Lahonton reponse001.jpg; ATT546054.htm; Lahonton reponse002.jpg; ATT546055.htm; Lahonton reponse003.jpg; ATT546056.htm

Other Government Agencies and the public are counting on you to protect the long term air quality of the High Desert. BMP do not do so and BACT as well as New Source review should be applied in the very least. Add all these comments, letters and documents to the official record.

D. Norman Diaz
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Barstow, CA 92311

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9/9/2008

The MDAQMD primarily regulates air emissions from operating facilities and can not go beyond state and federal mandated authority. Best Management Practices (BMP) allow the District to inspect for compliance and issue Notices of Violations (NOVs) for non-compliance with Rule 1133. Without BMPs, the District can only enforce permit conditions on permitted equipment and dust going over the property line. The District can not require BACT on an entire facility unless it is "major" for a nonattainment pollutant. An open air composting type of facility most likely won't be "major" because the emissions for stationary equipment aren't big enough. The District can't count "fugitive emissions" to make the facility major because the Federal Clean Air Act does not allow this.

Response to Attachments 1-9:

Attachment 1 and 3*:* The same response letter from the Air Resources Board (ARB) regarding a proposal to construct a new composting facility. The letter provides information about greenhouse gas emission evaluation to be conducted by ARB. The response directs the recipient to work with the MDAQMD regarding concerns Nursery Products, LLC.

Response to Attachment 1 and 3: The MDAQMD has held a series of public workshops and staff has been available to answer questions and concerns regarding Rule 1133 and the proposed Nursery Products project. The District will hold additional workshops and continue to be available for questions and comment.

Attachment 2: A response letter from ARB primarily addressing concerns about preparation of the EIR.

Response to Attachment 2: The District appreciates the submission of this correspondence.

Attachment 4: A summary of the SCAQMD 1133, 1133.1, and 1133.2 Rule actions.

Response to Attachment 4: These are the Rules the District was directed to evaluate in the CARB document "Proposed List of Measures to Reduce Particulate Matter – PM10 and PM2.5 (Implementation of Senate Bill 656, Sher 2003)", 11/18/2004. The MDAQMD completed the required analysis which was received and filed by the MDAQMD Governing Board at the 10/22/2007 meeting.

Attachment 5: A response letter from USEPA Region 9 stating they have no jurisdiction or direct role in these issues and to work with the San Bernardino County Board of Supervisors and the MDAQMD.

Response to Attachment 5: The MDAQMD has held a series of public workshops and staff has been available to answer questions and concerns regarding Rule 1133 and the proposed

Nursery Products project. The District will hold additional workshops and continue to be available for questions and comment.

Attachment 6: A summary of land application of sewage sludge issues.

Response to Attachment 6: Rule 1133 is a composting and related operations Rule. The Rule does not address land application of sewage sludge. This practice is permitted by San Bernardino County Department of Public Health as the Local Enforcement Agency (LEA).

Attachment 7: An update on Greenhouse Gas Emission Reporting in California.

Response to Attachment 7: ARB has indicated that they will be evaluating composting facilities for the purpose of reducing greenhouse gas (GHG) emissions, such as methane, pursuant to its mandate under the State's Global Warming Solutions Act in the near future. ARB also notes that it is unclear if a statewide measure similar to the SCAQMD or SJVUAPCD rules for the purpose of controlling VOC and ammonia emissions would reduce GHG emissions.

Attachment 8: The transcript from the 10/06/2003 meeting of the State of California Integrated Waste Management Board, Permitting and Enforcement Committee. This document in part deals with the previous Nursery Products operation in Adelanto.

Response to Attachment 8: This facility is no longer operational.

Attachment 9: A response letter from the State Water Resources Control Board. This letter discusses water quality issues including their relation to odors and visible dust. The recipient is directed to contact the MDAQMD regarding these issues.

Response to Attachment 9: The MDAQMD does not have the authority to enforce odor nuisance complaints. This authority is with San Bernardino County Department of Public Health as the LEA. (H&S §41705(a)(3)). The MDAQMD can enforce dust going over a property line pursuant to District Rules 402 and 403.

The District appreciates the submission of the information in these attachments. These attachments have been added to the official record of Rule 1133 as requested.

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Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 1:11 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 4
Attachments: 031106 City Hall Mad.pdf; ATT545984.htm; 040226 adelanto comments.pdf; ATT545985.htm; 040313 Sick people .pdf; ATT545986.htm; 040417 NP no more smell.pdf; ATT545987.htm; 040722Adelanto files stop NP.pdf; ATT545988.htm; 040919 panel struggles.pdf; ATT545989.htm; 040924 Judge dismiss claims.pdf; ATT545990.htm; 041112 NP agrees to move.pdf; ATT545991.htm; 041120 school issues with NP.pdf; ATT545992.htm; 050428 newberry meeting.pdf; ATT545993.htm; 050528 State concerns.pdf; ATT545994.htm; 050607 NP newberry conditions.pdf; ATT545995.htm; 050610 NP vote delayed in Newberry.pdf; ATT545996.htm; 050610 NP vote delayed longer version.pdf; ATT545997.htm; 050713 NP newberry EIR required.pdf; ATT545998.htm; 050722Adelanto files stop NP.pdf; ATT545999.htm; 050915 Adelanto orders NP to leave.pdf; ATT546000.htm; 051027 NP out of Newberry.pdf; ATT546001.htm; 060113 NP out of adelanto.pdf; ATT546002.htm; 060114 boss hogg in Newberry.pdf; ATT546003.htm; 060619 Hinkley site bigger and bigger.pdf; ATT546004.htm

Please look at these newspaper articles and see the 4+ years of problems associated with the much smaller Adelanto facility. We do not need another Dog food factory situation. It was not a few loads of fine dust or a load of grass clippings that caused all the issues. Please do not try to convince of that only a few loads of fine dirt used as bulking agent caused a brief period of problems. This was years of hell for people many miles away. Add these to the official record.

D. Norman Diaz
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9/9/2008

District response to Public Electronic Mail 27 #4 (20 attachments)

Attachments 1-20: These attachments are primarily newspaper articles concerning the Nursery Products operation in Adelanto, and the proposed relocation of the operation to Newberry Springs.

Response to Attachments 1-20: This facility is no longer operational and these documents do not have any bearing on the Rule 1133 development process

The MDAQMD does not have the authority to enforce odor nuisance complaints. This authority is with San Bernardino County Department of Public Health as the LEA (H&S §41705(a)(3)). The MDAQMD can enforce dust going over a property line pursuant to District Rules 402 and 403.

The District appreciates the submission of the compost related information in these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 1:14 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 5
Attachments: NurseryProductsÉomplai[10].PDF; ATT545956.htm; NurseryProductsÉP.I.(Fi[9].PDF; ATT545957.htm

Add these legal documents to the official record and explain how if there is any problems, this legal problem will not happen again.

D. Norman Diaz
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760 963-3585

9/9/2008

District response to Public Electronic Mail 27 #5 (2 attachments)

Attachment 1 and 2: Legal documents concerning the Nursery Products operation in Adelanto.

Response to Attachment 1 and 2: These documents do not have any bearing on the Rule 1133 development process.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 1:16 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 6
Attachments: permit conditions 2.pdf; ATT545947.htm; permit conditions.doc; ATT545948.htm

Please require a permit for any composting operation of 100,000 tons or more. Add these rules to any permit. Add these comments to the official record.

D. Norman Diaz
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9/9/2008

District response to Public Electronic Mail 27 #6 (2 attachments)

***Attachment 1 and* 2**: Permit conditions the commentator wishes to be required on the permit for any composting operation over 100,000 tons or more.

Response to Attachment 1 and 2: District imposed permit conditions on a facility or operation may not extend beyond the authority given the District in the State Clean Air Act, the Federal Clean Air Act, or those requirements set forth in the Rules in the District Rulebook. All permit conditions will be based only on this authority. Other agencies have the same authority to impose permit conditions based on their scope of authority as deemed by their governing statutes.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 1:20 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 7
Attachments: barstow heights resolution.pdf; ATT545887.htm; City of Barstow res 1.pdf; ATT545888.htm; DO_17991.pdf; ATT545889.htm; MWA res1.pdf; ATT545890.htm; newberry res1.pdf; ATT545891.htm; Barstow Heights CSD.doc; ATT545892.htm; BUSD petition 1.jpg; ATT545893.htm; silver vallet pet 1.pdf; ATT545894.htm; yermo res 1.jpg; ATT545895.htm; yermo res 2.jpg; ATT545896.htm; silver valley pet 2.pdf; ATT545897.htm; BUSD petition 2.jpg; ATT545898.htm; BUSD petition 3.jpg; ATT545899.htm; BUSD resolution 1.jpg; ATT545900.htm; BUSD resolution 2.jpg; ATT545901.htm; Resolution B Hispanic CoC.doc; ATT545902.htm; Resolution BarsÉHeights CSD.doc; ATT545903.htm; Resolution BCoC.doc; ATT545904.htm; Resolution Blank.doc; ATT545905.htm; Resolution Yermo CSD.doc; ATT545906.htm; newberry res2.pdf; ATT545907.htm; newberry res3.pdf; ATT545908.htm; newberry res4.pdf; ATT545909.htm; MWA res2.pdf; ATT545910.htm; City of Barstow res 2.pdf; ATT545911.htm; Resolutions against the S.doc; ATT545912.htm

Please add these resolutions against the Nursery Products facility in Hinkley to the official record.

D. Norman Diaz
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9/9/2008

District response to Public Electronic Mail 27 #7 (19 attachments)

Attachment 1-15, 17, and 18 are signed resolutions citing opposition of the Nursery Products project in Hinkley. ***Attachment 16*** is a blank template for a resolution. ***Attachment 19*** is a summary of several of these resolutions.

Response to Attachment 1-19: Approval or disapproval of the siting of a project falls within the scope of the land use agency. This San Bernardino County agency has the approval authority over the specific project, not the District.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Tracy Walters

From:	D. Norman Diaz [dnormdiaz@gmail.com]
Sent:	Friday, August 08, 2008 1:23 PM
To:	Tracy Walters
Cc:	Alan De Salvio
Subject:	Comments for Composting rule 8
Attachments:	Senator Boxer_Apr10_2008.doc; ATT545848.htm; STATE DHS LTR 050505.pdf; ATT545849.htm; super sch reponse001.jpg; ATT545850.htm; super sch reponse002.jpg; ATT545851.htm; Table of Contents 9-27-07.doc; ATT545852.htm

Add these to the official record.
Note the data on the regrowth of dangerous substances after the dust from sludge hits water.

D. Norman Diaz
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Barstow, CA 92311

760 963-3585

9/9/2008

District response to Public Electronic Mail 27 #8 (4 attachments)

Attachment 1: Letter to Barbara Boxer discussing concerns of pollution in sewage sludge.

Response to Attachment 1: The District appreciates the submission of the compost related information in this attachment.

Attachment 2: Letter from the California Department of Health Services addressing concerns of health concerns related to airborne exposure from Nursery Products.

Response to Attachment 2: The District appreciates the efforts of the DHS to investigate the source of complaints that may have been caused by exposure from Nursery Products while located in Adelanto and welcomes further input from this Agency.

Attachment 3: Letter from the California Department of Education regarding issues of a proposed bio-waste composting plant and potential impacts upon existing elementary schools in Barstow.

Response to Attachment 3: The District appreciates the efforts of the CDE to direct the Barstow Unified School District in the assignation of responsibilities to specific agencies. The MDAQMD has held a series of public workshops and staff has been available to answer questions and concerns regarding Rule 1133 and the proposed Nursery Products project. The District will hold additional workshops and continue to be available for questions and comment.

Attachment 4: Table of Contents (60 sources listed)

Response to Attachment 4: This document and all supporting literature was previously submitted on October 1, 2007 and reviewed by District staff prior to preparation of the Technical Discussion. All documents remain on file. This attachment has been added to the official record of Rule 1133 as requested.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 1:25 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 9
Attachments: BARSTOW, CALIFORNIA - Climate Summary.pdf; ATT545814.htm; CALIFORNIA pan evaporation.doc; ATT545815.htm; CALIFORNIA wind speed.doc; ATT545816.htm; DAGGETT FAA AIRPORT, CALIFORNIA - Climate Summary.pdf; ATT545817.htm; hanaford differences.doc; ATT545818.htm; Hanaford odor control.doc; ATT545819.htm; hanaford quantity .doc; ATT545820.htm; LittleHanafordFarms descr.doc; ATT545821.htm; LittleHanafordFarmsL-604.pdf; ATT545822.htm; Manure&CompostList.pdf; ATT545823.htm; OLYMPIA WSO AP, WASHINGTON - Climate Summary.pdf; ATT545824.htm; WASHINGTON pan evap.doc; ATT545825.htm; WASHINGTON wind speed.doc; ATT545826.htm

As I spoke of at the June 2008 MDAQMD meeting, Hanaford Farms is a bad example to use in any rule making. Please add these docs to the official record.

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9/9/2008

District response to Public Electronic Mail 27 #9 (13 attachments)

Little Hanaford Farms was a study and permitting action that was referenced in the SJVAPCD Rule 4565 – *Biosolids, Animal Manure, and Poultry Litter Operations,* adopted 03/15/2007. The SJVAPCD Rule was examined to fulfill the commitment made in response to the CARB Proposed List of Measures to Reduce Particulate Matter – PM10 and PM2.5.

Attachments 1, 4, and 11: Period of Record Monthly Climate Summary for Barstow, CA, Daggett FAA Airport, CA, and Olympia WSO AP, WA.

Response to Attachments 1, 4, and 11: The District appreciates the submission of the weather related information in this attachment.

Attachments 2 and 12: Monthly Average Pan Evaporation (Inches) data for California and Washington

Response to Attachments 2 and 12: The District appreciates the submission of the weather related information in this attachment.

Attachments 3 and 13: Monthly Average Wind Speed (MPH) data for California and Washington

Response to Attachments 3 and 13: The District appreciates the submission of the weather related information in this attachment.

Attachment 5: Weather comparison summary for CA and WA.

Response to Attachment 5: The District appreciates the submission of the comparison of information in this attachment.

Attachment 6 and 7: (duplicate) Article about bioaugmentation approach to odor control.

Response to Attachment 6 and 7: The District appreciates the submission of the composting related information in this attachment.

Attachment 8 and 9: Applications for Little Hanaford Farms composting facility

Response to Attachment 8 and 9: The District appreciates the submission of the composting related information in this attachment.

Attachment 10: Manure and Compost List

Response to Attachment 10: The District appreciates the submission of the composting related information in this attachment.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

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Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 1:30 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 10
Attachments: 2006-11 PRT AGENDA PKT.pdf; ATT545786.htm; Runner letter.pdf; ATT545787.htm; SB CTY DEIR NURÉ LTR 111306.pdf; ATT545788.htm; SB CTY DPH LTR 111203.pdf; ATT545789.htm; Scope comments from Conner.pdf; ATT545790.htm; wrir014002.pdf; ATT545791.htm

Please add these to the official record.

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9/9/2008

District response to Public Electronic Mail 27 #10 (6 attachments)

Attachment 1: Mojave Water Agency Planning, Resources and Technology Committee Meeting, 11/07/2006

Response to Attachment 1: No information in Agenda pertaining to referenced item. Document states it is a study session only. The District appreciates the submission of the information in this attachment.

Attachment 2: Letter from Sharon Runner regarding Mitigation Requirements for Nursery Products Hawes Composting Facilities urging requirement for facility enclosure.

Response to Attachment 2: The MDAQMD primarily regulates air emissions from operating facilities and can not go beyond state and federal mandated authority. The District can not require BACT (enclosure) on an entire facility unless it is "major" for a nonattainment pollutant. An open air composting type of facility most likely won't be "major" because the emissions for stationary equipment aren't big enough. The District can't count "fugitive emissions" to make the facility major because the Federal Clean Air Act does not allow this.

Attachment 3: Mojave Water Agency 11/13/06 letter to San Bernardino County Land Use Services Department regarding water quality issues.

Response to Attachment 3: Water issues are dealt with by the State Water Control Board (Lahontan region) as well as appropriate land use agencies. The MDAQMD does not have the authority to regulate water quality control issues.

Attachment 4: Letter from San Bernardino County Department of Public Health to the CIWMB 11/12/03 with NOV from the City of Adelanto attached.

Response to Attachment 4: The District appreciates the submission of this attachment. This facility is no longer operating in Adelanto and the information is inapplicable.

Attachment 5: Letter to San Bernardino County Land Use Services Department from the Desert Tortoise Preserve Committee, Inc., 06/05/2006.

Response to Attachment 5: The MDAQMD has no authority over endangered species protection/degradation caused by a specific project.

Attachment 6: Simulation of Ground-Water Flow in the Mojave River Basin, California.

Response to Attachment 6: Water issues are dealt with by the State Water Control Board (Lahontan region) as well as appropriate land use agencies. The MDAQMD does not have the authority to regulate water quality control issues.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

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Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 4:41 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 11
Attachments: for redlands ABT Haskell.doc; ATT545761.htm; ABT Redlands .doc; ATT545762.htm; Envi Valu 7-29-05.doc; ATT545763.htm; redlands ceqa impacts.doc; ATT545764.htm; Redlands Daily Facts aug 05.doc; ATT545765.htm; ABT Brochure 6 p. 8 x 11.pdf; ATT545766.htm; ABT Odor ControÉeport F[1].pdf; ATT545767.htm

Please add this to the official record.

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9/9/2008

District response to Public Electronic Mail 27 #11 (7 attachments)

Attachments 1-7: All regarding the Redlands ABT-Haskell composting project.

Response to Attachments 1-7: Redlands considered a partnership with ABT-Haskell, LLC. This project was to have been an in-vessel composting facility utilizing the Airlance™ technology, but the project is on hold and it is unlikely that it will come to fruition according to the City of Redlands.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 4:45 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 12
Attachments: LXX_Project_Descriiption_Rev_1A.pdf; ATT545729.htm; Inland Empire Utilities Agency Impacted by Kern County Ban on Biosolids.pdf; ATT545730.htm; delta_complete_wastewater.pdf; ATT545731.htm; EPA Enclosed Bi...f Volatiles.pdf; ATT545732.htm; EPA Enclosed Bi...lter System.pdf; ATT545733.htm; 080706 Banning plan.pdf; ATT545734.htm; 080706 Banning sludge 2 power.pdf; ATT545735.htm; 080707 Banning notes.doc; ATT545736.htm; 080707 Banning no o.pdf; ATT545737.htm; 080707 Banning no opposition.pdf; ATT545738.htm; recharge station.pdf; ATT545739.htm

Please add these to the official record.

D. Norman Diaz
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9/9/2008

District response to Public Electronic Mail 27 #12 (8 attachments)

Attachment 1, 5, 6, 7 and 8: Attachments regarding Liberty Energy project in Banning, CA.

Response to Attachment 1, 5, 6, 7 and 8: Rule 1133 is not a power generating rule. This specific technology could be proposed by a facility and then be regulated by an applicable MDAQMD rule(s).

Attachment 2: Attachment providing update on IEUA enclosed composting facility.

Response to Attachment 2: The District appreciates the submission of this information.

Attachment 3: "Complete Solutions for On-Site Wastewater Management" brochure.

Response to Attachment 3: Rule 1133 is not a wastewater treatment rule. This specific technology could be proposed by a facility and then be regulated by an applicable MDAQMD rule(s).

Attachment 4: "An Analysis of Composting as an Environmental Remediation Technology" document.

Response to Attachment 4: The MDAQMD evaluated Aerated Pile Composting systems in the cost-effectiveness analysis portion of the Technical Discussion for the Health & Safety Code §39614 Feasibility Analysis for Composting and Related Operations. Rule 1133 does not deal with the remediation of soils contaminated with toxic organic compounds. This specific technology could be proposed by a facility and then be regulated by an applicable MDAQMD rule(s).

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 08, 2008 4:54 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 13
Attachments: 0053SG1.XLS; ATT545689.htm; 0053VA1.XLS; ATT545690.htm; 0055SG1.XLS; ATT545691.htm; 0055VA1.XLS; ATT545692.htm; P2800053.pdf; ATT545693.htm; P2800055.pdf; ATT545694.htm; Hirsch declaration.pdf; ATT545695.htm; hispanic issue1.doc; ATT545696.htm; 071014 MDAQMD Board letter.pdf; ATT545697.htm; 070122 MDAQMD letter.pdf; ATT545698.htm; M Reilly comment1.doc; ATT545699.htm; M Reilly comment2.doc; ATT545700.htm; M Reilly comment3.doc; ATT545701.htm

Please add these to the official record. Hispanic information has been asked for and yet none has been supplied. Why not. All information, notices and data should be available in Spanish.

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9/9/2008

District response to Public Electronic Mail 27 #13 (13 attachments)

As the proposed rule applies District-wide, and the 2000 United States Census for the County of San Bernardino indicates that 66 percent of the residents of the County of San Bernardino speak English as their primary language, the District produces all documents in English. The District has provided and will provide assistance to non-English speakers if requested and when feasible.

Attachment 1-6: Hinkley Baseline/Background Samples P2800053 and P2800055submitted to Columbia Analytical Services Lab 01/09/2008.

Response to Attachment 1-6: The District appreciates the submission of this information.

Attachment 7 and 8: Declaration and additional unsigned letter that cites Spanish materials have not been provided.

Response to Attachment 7 and 8: This email is the first request the MDAQMD has ever received for Spanish language translation of materials. The district included the wording "Reasonable accommodations for language or disability are available upon request. Acomodaciones razonables para los idiomas extranjeros o las inhabilidades estan disponibles a solicitud" on the latest public workshop notice.

Attachment 9: Presentation to MDAQMD Board Members, 10/15/2007 by Norman Diaz,

Response to Attachment 9: The MDAQMD primarily regulates air emissions from operating facilities and can not go beyond state and federal mandated authority. The District can not require BACT (enclosure) on an entire facility unless it is "major" for a nonattainment pollutant. An open air composting type of facility most likely won't be "major" because the emissions for stationary equipment aren't big enough. The District can't count "fugitive emissions" to make the facility major because the Federal Clean Air Act does not allow this.

Attachment 10: Undated presentation to the Board by Norman Diaz.

Response to Attachment 10: See response to Attachment 9 above. There are no CARB laws that make composting facilities illegal. The composting control measures that the District was instructed to analyze for cost-effectiveness in the Proposed List of Measures to Reduce Particulate Matter – PM10 and PM2.5 were not required by CARB to be adopted by the District. That document specifically says that "Because the challenges vary from area to area as outlined above, each air district will need to consider a different mix of measures to address the unique nature of the PM problem in their region."[17]

Attachment 11, 12 and 13: Comment letters on Draft EIR.

Response to Attachment 11, 12 and 13: Thank you for the background information on the DEIR comments. These items should have been considered at the time of the EIR preparation.

[17] State of California Air Resources Board, *Proposed List of Measures to Reduce Particulate Matter -- PM10 and PM2.5 (Implementation of Senate Bill 656, Sher 2003),* (November 186, 2004), pg. 5.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

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Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Thursday, August 14, 2008 5:00 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for Composting rule 14
Attachments: IEUA-Inland Empire Regional Composting Facility.pdf; ATT12955.htm; IngentaConnect INDOOR COMPOSTING FACILITY ODOR CONTROL_ PERCEPTION, PROCESS, AND PERFORMANCE.pdf; ATT12956.htm; IngentaConnect INDOOR COMPOSTING FACILITY ODOR CONTROL_ PERCEPTION, PROCESS, AND....pdf; ATT12957.htm; Inland Empire Regional Composting Authority.pdf; ATT12958.htm; Inland Empire Utiliti#FCDC4.pdf; ATT12959.htm; Inland Empire Utilities Agency Impacted by Kern County Ban on Biosolids.pdf; ATT12960.htm; isw_2006_05.pdf; ATT12961.htm

Please include these in the record for the composting rule. Rancho Cucamonga indoor and filtered composting facility.

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9/9/2008

District response to Public Electronic Mail 27 #14 (6 attachments)

Attachment 1-6: Inland Empire Utilities Agency's Inland Empire Regional Composting Facility information.

Response to Attachment 1-6: The cost information and control technology from this project was considered in the cost-effectiveness portion of the Technical Discussion, *Health & Safety Code §39614 Feasibility Analysis for Composting and Related Operations*, and has been updated for this staff report.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Public Comment 27, Electronic Mail #15

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 15, 2008 4:40 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for composting rule 1133 #15
Attachments: Hazardous and Toxic Waste.pdf; ATT292581.htm; Municipal Waste Problems.pdf; ATT292582.htm; Waste-to-Energy Technology Announcement.pdf; ATT292583.htm; Waste-to-Energy Technology Announcement2.pdf; ATT292584.htm; Waste-to-Energy Technology Enquiries.pdf; ATT292585.htm

Please add these to the official record on rule 1133 as well as the previous comments 1 to 14 and any other sent in by concerned citizens. This is another example of cost effective ways to deal with sludge and reduce air emissions at the same time. ILS-Partners. Contact them for more background to their system.

Please confirm receipt of this email and material it contains.
thanks

norman

D. Norman Diaz
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Barstow, CA 92311

760 963-3585

9/9/2008

District response to Public Electronic Mail 27 #15 (5 attachments)

Attachment 1-5: Innovative Logistics Solutions, Inc Waste-to-Energy Technology

Response to Attachment 1-5: Rule 1133 is not a waste-to-energy rule. This specific technology could be proposed by a facility and then be regulated by an applicable MDAQMD rule(s).

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Saturday, August 16, 2008 1:00 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for composting rule 1133 #16
Attachments: 25 Feb 2008 MDAQMD.doc; ATT292548.htm; ARB 2nd001.jpg; ATT292549.htm; ARB 2nd002.jpg; ATT292550.htm; ARB reponse001.jpg; ATT292551.htm; ARB reponse002.jpg; ATT292552.htm; EPA response001.jpg; ATT292553.htm; GHG reporting001.jpg; ATT292554.htm; Lahonton reponse001.jpg; ATT292555.htm; Lahonton reponse002.jpg; ATT292556.htm; Lahonton reponse003.jpg; ATT292557.htm; super sch reponse001.jpg; ATT292558.htm; super sch reponse002.jpg; ATT292559.htm

Please add these to the official record on rule 1133 as well as the previous comments 1 to 15 and any other sent in by concerned citizens. Misc documents from Feb 2008 meeting and other material.

Please confirm receipt of this email and material it contains.
thanks

norman

D. Norman Diaz
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9/9/2008

District response to Public Electronic Mail 27 #16 (5 attachments)

Attachment 1: The District appreciates the submission of this information.

Response to Attachment 1: The content of incoming sludge into a composting facility is not regulated by the MDAQMD. Metal concentration limits are specified by 14 CCR §17868.2, and pathogen reduction requirements are specified in 14 CCR § 17868.3 and enforced by CIWMB and/or LEA.

Attachment 2-7: Various letters.

Response to Attachment 2-7: These letters have been submitted in previous attachments and addressed. Attachment 2 was responded to in District response to Public Electronic Mail 27 #3, Attachment 1. Attachment 3 was responded to in District response to Public Electronic Mail 27 #3, Attachment 2. Attachment 4 was responded to in District response to Public Electronic Mail 27 #3, Attachment 5. Attachment 5 was responded to in District response to Public Electronic Mail 27 #3, Attachment 7. Attachment 6 was responded to in District response to Public Electronic Mail 27 #3, Attachment 9. Attachment 7 was responded to in District response to Public Electronic Mail 27 #8, Attachment 3.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Saturday, August 23, 2008 12:46 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for composting rule 1133 #17
Attachments: EPA pathogen and vector control.pdf; ATT292481.htm; Pathogen in lbs.xls; ATT292482.htm; Newsolutions.pdf; ATT292483.htm; Ovitt against NPLLC.pdf; ATT292484.htm; recharge site map103.pdf; ATT292485.htm; keating letter 1.pdf; ATT292486.htm; keating letter 2.pdf; ATT292487.htm; keating letter 3.pdf; ATT292488.htm; 9906 EHIB bioaerosols.pdf; ATT292489.htm; Army remediation technologies.pdf; ATT292490.htm; organicchemicals.pdf; ATT292491.htm; IJOEH_1104_Snyder.pdf; ATT292492.htm

Please add these to the official record on rule 1133 as well as the previous comments 1 to 16 and any other sent in by concerned citizens.

Please confirm receipt of this email and material it contains.
thanks

norman

D. Norman Diaz
25789 Community Blvd
Barstow, CA 92311

760 963-3585

9/9/2008

District response to Public Electronic Mail 27 #17 (10 attachments)

Attachment 1: USEPA Environmental Regulations and Technology "Control of Pathogens and Vector Attraction in Sewage Sludge", 10/99.

Response to Attachment 1: This document is not regulatory in nature. This document is only intended to serve as a guide to pathogen and vector attraction reduction for anyone who is involved with the treatment of sewage sludge for land application. Rule 1133 is a composting rule, not a land application rule.

Attachment 2: Pathogen estimates.

Response to Attachment 1: The District appreciates the submission of this attachment. The content of incoming sludge into a composting facility is not regulated by the MDAQMD. Pathogen reduction requirements are specified in 14 CCR § 17868.3 and enforced by CIWMB and/or LEA.

Attachment 3: "Investigation of Alleged Health Incidents Associated With Land Application of Sewage Sludge"

Response to Attachment 3: Rule 1133 is a composting rule, not a land application rule.

Attachment 4: Press statement from Supervisor Gary Ovitt, 02/26/2007

Response to Attachment 4: The District appreciates the submission of this attachment.

Attachment 5: Location of Mojave Water Agency artificial-recharge sites in the Mojave River ground-water basin, Southern California.

Response to Attachment 5: The District appreciates the submission of this attachment. Water issues are dealt with by the State Water Control Board (Lahontan region) as well as appropriate land use agencies. The MDAQMD does not have the authority to regulate water quality control issues.

Attachment 6: Letter

Response to Attachment 6: Attachment 6 was responded t in District response to Public Electronic Mail 27 #3, Attachment 9.

Attachment 7: "Bioaerosols and Green-Waste Composting in California", 06/99.

Response to Attachment 7: The District appreciates the submission of this attachment.

Attachment 8: US Army Corps of Engineers, "Safety and Health Aspects of HTRW Remediation Technologies", 08/15/03.

Response to Attachment 8: The District appreciates the submission of this attachment. The content of incoming sludge into a composting facility is not regulated by the MDAQMD. Metal concentration limits are specified by 14 CCR §17868.2, and pathogen reduction requirements are specified in 14 CCR § 17868.3 and enforced by CIWMB and/or LEA.

Attachment 9: "Organic Chemicals in Sewage Sludges."

Response to Attachment 9: The District appreciates the submission of this attachment. The content of incoming sludge into a composting facility is not regulated by the MDAQMD. Metal concentration limits are specified by 14 CCR §17868.2, and pathogen reduction requirements are specified in 14 CCR § 17868.3 and enforced by CIWMB and/or LEA.

Attachment 10: "The Dirty Work of Promoting "Recycling" of America's Sewage Sludge"

Response to Attachment 10: The District appreciates the submission of this attachment. Rule 1133 is a composting rule, not a land application rule.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

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Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Saturday, August 23, 2008 4:13 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: Comments for composting rule 1133 #18
Attachments: aem00146-0194.pdf; ATT292466.htm; asthma and VOCs.pdf; ATT292467.htm; Levels of Gram-Negative Bacteria, Aspergillus fumigatus,; ATT292468.htm; Milogranite and PCBs in compost.doc; ATT292469.htm; Monitoring of Bioaerosol Emission from a Sludge Composting Facility.pdf; ATT292470.htm

Please add these to the official record on rule 1133 as well as the previous comments 1 to 17 and any other sent in by concerned citizens. Misc documents from Feb 2008 meeting and other material.

Please confirm receipt of this email and material it contains.
thanks

norman

D. Norman Diaz
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Barstow, CA 92311

760 963-3585

9/9/2008

District response to Public Electronic Mail 27 #18 (5 attachments)

Attachment 1: "Effect of Temperature on Composting of Sewage Sludge"

Response to Attachment 1: The District appreciates the submission of this attachment. Temperature requirements are specified in 14 CCR §17666.3 and enforced by the LEA.

Attachment 2: "Analysis of Exhaled Breath versus Ambient VOCs in relation to Asthma Symptoms"

Response to Attachment 2: The District appreciates the submission of this attachment.

Attachment 3: "Levels of Gram-Negative Bacteria, *Aspergillus fumigatus*, Dust, and Endotoxin at Compost Plants"

Response to Attachment 3: The District appreciates the submission of this attachment.

Attachment 4: "Fertilizer sent to landfills: Tainted product could cost MMSD $1.8 million"

Response to Attachment 4: The District appreciates the submission of this attachment. The content of incoming sludge into a composting facility is not regulated by the MDAQMD. Sludge limits are specified by 14 CCR Chapter 3.1, and enforced by CIWMB and/or LEA.

Attachment 5: "Monitoring of Bioaerosol Emission from a Sludge Composting Facility"

Response to Attachment 5: The District appreciates the submission of this attachment.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Public Comment 27, Electronic Mail #18
(Duplicate numbered comment)

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Tuesday, August 26, 2008 2:41 PM
To: Tracy Walters
Subject: Re: Comments for composting rule 1133 #18
Attachments: 080820 ND comments.pdf; ATT298822.htm

Tracy
Here it is again.

Thanks

norman

D. Norman Diaz
25789 Community Blvd
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760 963-3585

9/9/2008

District response to Public Electronic Mail 27 #18

The District appreciates the submission of this attachment. This attachment has been previously received and addressed in the District Response to Comment Letter 26.

This attachment has been added to the official record of Rule 1133 as requested.

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Tuesday, August 26, 2008 5:16 PM
To: Tracy Walters
Cc: Alan De Salvio
Subject: comments for composting rule 1133 #19
Attachments: 060710 methane emissions characterization.pdf; ATT299469.htm; 060900 Draft EIR NPLLC.pdf; ATT299470.htm; 061000 hyginic aspects of sludge.pdf; ATT299471.htm; 070117 metals in sludge into plants.pdf; ATT299472.htm; 070700 cornel compost emissions.pdf; ATT299473.htm; 070831 temp and emissions.pdf; ATT299474.htm

Please add these to the official record.

Norman

D. Norman Diaz
25789 Community Blvd
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9/9/2008

District response to Public Electronic Mail 27 #19 (6 attachments)

Attachment 1: "Methane emissions from composting"

Response to Attachment 1: The District appreciates the submission of this attachment. The District concurs that the emission measurement for methane can vary depending on compost pile characteristics and management factors.

Attachment 2: **"**Draft Environmental Impact Report Nursery Products Hawes Composting Facility"

Response to Attachment 2: The District appreciates the submission of this attachment.

Attachment 3: "Characterization of sludges – Hygienic aspects – Good practice for the use of sludge"

Response to Attachment 3: The District appreciates the submission of this attachment.

Attachment 4: "Fractionation, characterization and speciation of heavy metals in composts and compost-amended soils"

Response to Attachment 4: The District appreciates the submission of this attachment. The content of incoming sludge into a composting facility is not regulated by the MDAQMD. Metal concentration limits are specified by 14 CCR §17868.2, and pathogen reduction requirements are specified in 14 CCR § 17868.3 and enforced by CIWMB and/or LEA.

Attachment 5: Compost Facilities: Off-Site Air Emissions and Health"

Response to Attachment 5: The District appreciates the submission of this summary of literature regarding composting issues.

Attachment 6: "Carbon Turnover and Ammonia Emissions during Composting of Biowaste at Different Temperatures"

Response to Attachment 6: The District appreciates the submission of this attachment. Temperature requirements are specified in 14 CCR §17666.3 and enforced by the LEA.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Tracy Walters

From: D. Norman Diaz [dnormdiaz@gmail.com]
Sent: Friday, August 15, 2008 3:37 PM
To: Teri; Alan De Salvio; Tracy Walters
Subject: Re: Meeting on Monday
Attachments: final_comment_letter_on_Rule_1133.pdf; ATT14622.htm; list of reasons.doc; ATT14623.htm; 390440815200801082476 2.pdf; ATT14624.htm

Teri
That report is great. You can send it in by email or bring to meeting. Also cc me and ask for verification that they received it. Attached is the comments. I will try to get them on the web site at some point when I have a moment.

We need as much econ data like that as possible. But lets not forget the health. Unfortunately, if they open and then when we start getting sick, then the health data can help as the Sludge Company will be gone and not responsible for any issues they caused. Then some lawyer can get rich and famous (brockavich) by getting some compensation for some of the effected population.

Too much desk work and calling makes me bitter, sorry. I've been at it for 48 hours since I arrived home.

Send that and any other docs to :

twalters@mdaqmd.ca.gov Tracy Walters
adesalvio@mdaqmd.ca.gov Alan de Salvio

Say they are for the rule on Composting #1133

Attached is the comments and the new EIR which is being pushed through quickly.

Every bit helps and I am nothing if not determined.

norman

D. Norman Diaz
25789 Community Blvd
Barstow, CA 92311

760 963-3585

On Aug 15, 2008, at 2:48 PM, Teri wrote:

> Norm,
> I didn't get to see the comments that you were working on it took me somewhere else.
> Yes, I'm back from my break.
> Here is an economic/impact report, I didn't know if you had time to read it yet.
> http://www.liberty23.com/EconomicReport/EIBR.html
>
> *"Happiness is a Choice"*

9/3/2008

District response to Public Electronic Mail 28 (3 attachments)

Attachment 1: Letter from the Center on Race, Poverty & the Environment

Response to Attachment 1: The District appreciates the submission of this attachment. This attachment has been previously received and addressed in the District Response to Comment Letter 16.

Attachment 2: "Why proposed Rule 1133 is Bad for the Mojave Desert Air District"

Response to Attachment 2: The District appreciates the submission of this attachment. This attachment has been previously received and addressed in the District Response to Electronic Mail 27 #1, attachment 1.

Attachment 3: County of San Bernardino Request for Proposals, Environmental Consulting Services for the Preparation of a Supplemental EIR.

Response to Attachment 3: The District appreciates the submission of this attachment.

The District appreciates the submission of these attachments. These attachments have been added to the official record of Rule 1133 as requested.

Appendix "D"

California Environmental Quality Act
Documentation

1. Draft Notice of Exemption, San Bernardino County
2. Draft Notice of Exemption, Riverside County

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NOTICE OF EXEMPTION

TO: County Clerk
San Bernardino County
385 N. Arrowhead, 2nd Floor
San Bernardino, CA 92415

FROM: Mojave Desert
Air Quality Management District
14306 Park Ave
Victorville, CA 92392-2310

X MDAQMD Clerk of the Governing Board

PROJECT TITLE: Adoption of Rule 1133 – *Composting and Related Operations*

PROJECT LOCATION – SPECIFIC: San Bernardino County portion of the Mojave Desert Air Basin and Palo Verde Valley portion of Riverside County.

PROJECT LOCATION – COUNTY: San Bernardino and Riverside Counties

DESCRIPTION OF PROJECT: The adoption of proposed Rule 1133 will satisfy the recommendation made in the *Health & Safety Code §39614 Feasibility Analysis for Composting and Related Operations* that was received and filed by the MDAQMD Governing Board on 10/22/2007.

NAME OF PUBLIC AGENCY APPROVING PROJECT: Mojave Desert AQMD

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: Mojave Desert AQMD

EXEMPT STATUS (CHECK ONE)

Ministerial (Pub. Res. Code §21080(b)(1); 14 Cal Code Reg. §15268)
Emergency Project (Pub. Res. Code §21080(b)(4); 14 Cal Code Reg. §15269(b))
X Categorical Exemption – Class 8 (14 Cal Code Reg. §15308)

REASONS WHY PROJECT IS EXEMPT: The adoption of proposed Rule 1133 is exempt from CEQA review because it will not create any adverse impacts on the environment. Proposed Rule 1133 is an action taken by a regulatory agency pursuant to the provisions of H&S Code Division 26 to assure the protection of the environment, specifically the proposed Rule enhances the control of PM_{10} emissions from certain composting and composting related operations where no such control has been previously imposed upon this particular source category. As a new regulatory control measure, the adoption of proposed Rule 1133 has no potential to cause the release of additional air contaminants or create any adverse environmental impacts. Therefore, a Class 8 categorical exemption (14 Cal. Code Reg. §15308) applies.

LEAD AGENCY CONTACT PERSON: Eldon Heaston **PHONE:** (760) 245-1661

SIGNATURE: _____ **TITLE:** Executive Director **DATE:** 10/27/2008

DATE RECEIVED FOR FILING:

NOTICE OF EXEMPTION

TO: Clerk/Recorder
Riverside County
3470 12th St.
Riverside, CA 92501

FROM: Mojave Desert
Air Quality Management District
14306 Park Ave
Victorville, CA 92392-2310

X MDAQMD Clerk of the Governing Board

PROJECT TITLE: Adoption of Rule 1133 – *Composting and Related Operations*

PROJECT LOCATION – SPECIFIC: San Bernardino County portion of the Mojave Desert Air Basin and Palo Verde Valley portion of Riverside County.

PROJECT LOCATION – COUNTY: San Bernardino and Riverside Counties

DESCRIPTION OF PROJECT: The adoption of proposed Rule 1133 will satisfy the recommendation made in the *Health & Safety Code §39614 Feasibility Analysis for Composting and Related Operations* that was received and filed by the MDAQMD Governing Board on 10/22/2007.

NAME OF PUBLIC AGENCY APPROVING PROJECT: Mojave Desert AQMD

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: Mojave Desert AQMD

EXEMPT STATUS (CHECK ONE)

Ministerial (Pub. Res. Code §21080(b)(1); 14 Cal Code Reg. §15268)
Emergency Project (Pub. Res. Code §21080(b)(4); 14 Cal Code Reg. §15269(b))
X Categorical Exemption – Class 8 (14 Cal Code Reg. §15308)

REASONS WHY PROJECT IS EXEMPT: The adoption of proposed Rule 1133 is exempt from CEQA review because it will not create any adverse impacts on the environment. Proposed Rule 1133 is an action taken by a regulatory agency pursuant to the provisions of H&S Code Division 26 to assure the protection of the environment, specifically the proposed Rule enhances the control of PM_{10} emissions from certain composting and composting related operations where no such control has been previously imposed upon this particular source category. As a new regulatory control measure, the adoption of proposed Rule 1133 has no potential to cause the release of additional air contaminants or create any adverse environmental impacts. Therefore, a Class 8 categorical exemption (14 Cal. Code Reg. §15308) applies.

LEAD AGENCY CONTACT PERSON: Eldon Heaston **PHONE:** (760) 245-1661

SIGNATURE: _____ **TITLE:** Executive Director **DATE:** 10/27/2008

DATE RECEIVED FOR FILING:

Appendix "E"
Bibliography

The following documents were consulted in the preparation of this staff report.

1. CARB Staff Report, *Proposed List of Measures to Reduce Particulate Matter – PM10 and PM2.5 (Implementation of Senate Bill 656, Sher 2003),* 11/18/2004.
2. MDAQMD, *List and Implementation Schedule for District Measures to Reduce PM Pursuant to Health & Safety Code §39614(d)*, June 27, 2005.
3. MDAQMD Technical Report, *Health & Safety Code §39614 Feasibility Analysis for Composting and Related Operations*, October 22, 2007.
4. San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4565 – *Biosolids, Animal Manure, and Poultry Litter Operations*, 03/15/2007.
5. South Coast Air Quality Management District (SCAQMD) Rule 1133 – *Composting and Related Operation, General Administrative Requirements*, 01/10/2003.
6. SCAQMD Rule 1133.1 – *Chipping and Grinding Activities*, 01/10/2003.
7. SCAQMD Rule 1133.2 – *Emission Reduction from Co-Composting Operations*, 01/10/2003.

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